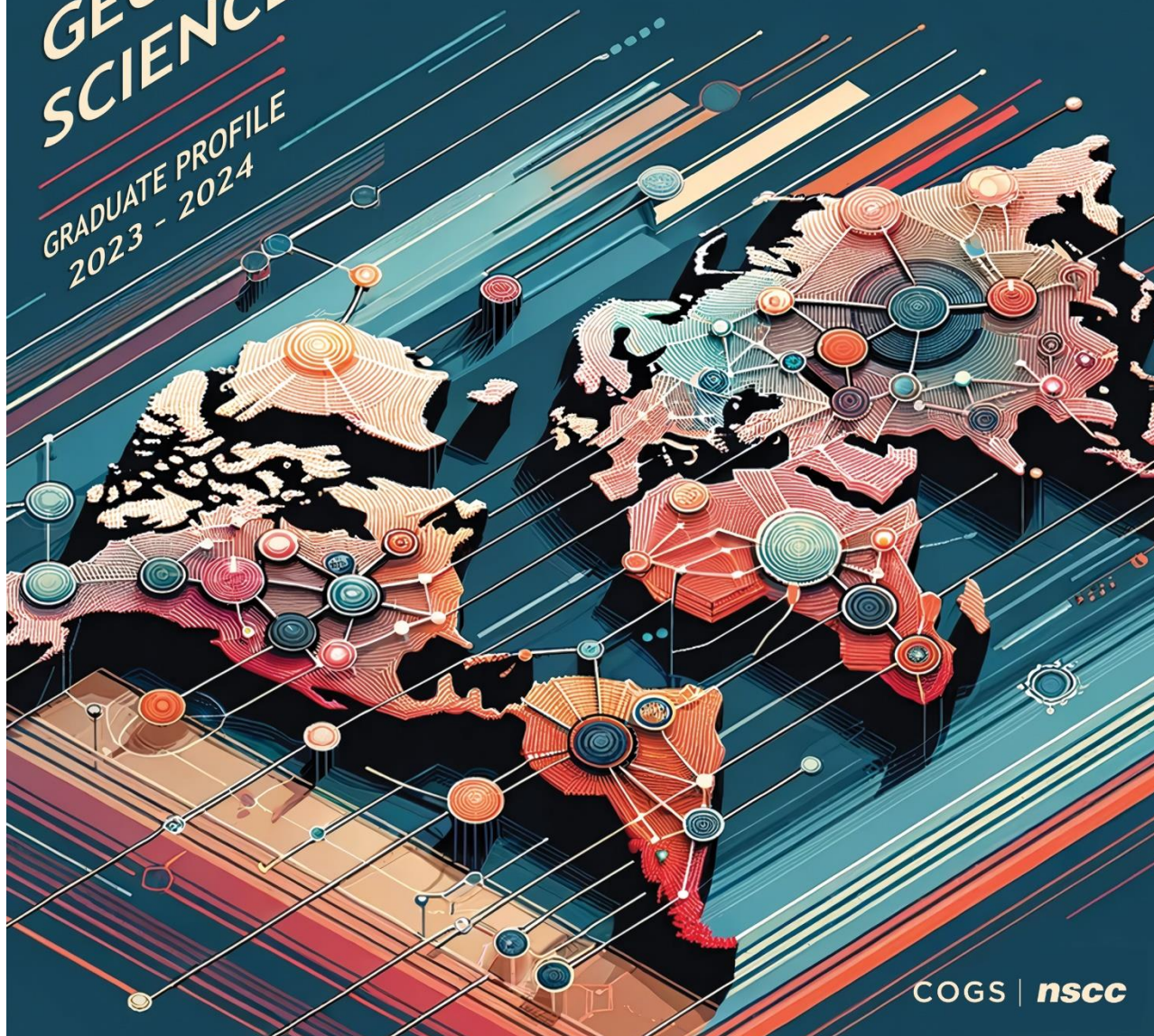# CENTRE OF GEOGRAPHIC SCIENCES

GRADUATE PROFILE
2023 – 2024

COGS | nscc

Introduction

Welcome to the *2023-2024 Graduate Profile* booklet for the Centre of Geographic Sciences (COGS). This book is designed to help you, the employer, seek out and find a suitable candidate for a position within your company. Our graduates come with varied backgrounds, experiences, and skill sets and are eager to help you fill the needs of your organization.

Over the past year or two, this fine group of students has worked hard to meet the demands of a rigorous school schedule while expanding their knowledge of a variety of geomatics theory and software. It is with excitement and anticipation that the graduates begin to explore the geomatics industry to apply newly acquired knowledge.

To help you find the appropriate candidate, the profile booklet is organized by discipline of study. A list of programs and graduates are found after the introductory letters, providing a quick glance at the graduates and their areas of expertise. A program overview, followed by the resumes of graduates from the program, is given in the order seen in the program and graduate list. At the back of the book, a set of guidelines will assist you in getting the contact information of the graduates you wish to reach.

Again, thank you for taking time to read the *2023-2024 Graduate Profile* booklet and we, the graduating class of 2024, sincerely hope you find a graduate who fills your needs.

Acknowledgements

Photo Credits

Student portraits provided by each student. Faculty & staff photos provided by the individual. Cover design by Ashwin Chandrasekar, using the AI prompt: "*An artistic representation of a network connecting points on a map, symbolizing the connections between COGS graduates and the geospatial industry. Include ideas like isometric, cartography, diorama in a contemporary style*". Post processed in Adobe Photoshop 2022. Page ii image: by Logan Balch.

This booklet will be on-line (PDF) at https://bit.ly/COGS2024Grads in late January.

A Brief History of COGS

A Nova Scotia Institution Since 1948

NSLSI: Nova Scotia Land Survey Institute (1948-1986)

From its inception in 1948 by Major J.A.H. Church as a survey school, the facility developed into a diversified training institution for Surveying, Mapping and Computer Programming.

College of Geographic Sciences (1986-1998)

In 1986, NSLSI was officially changed to the *Nova Scotia College of Geographic Sciences*, under an act of the Provincial Legislature. The new name was selected to better reflect the diversity of geographic sciences taught in Lawrencetown. The brand COGS became synonymous with excellence in geomatics training on a national and international basis.

In 1989, the college was incorporated as a campus of a recently formed community college system that would become known as *Nova Scotia Community College (NSCC)*.

COGS: Centre of Geographic Sciences (1998-Present)
Annapolis Valley Campus, NSCC

The *Annapolis Valley Campus (AVC)* of the Nova Scotia Community College was created in 1998 through the merger of the former Annapolis Campus located in Middleton and the former Nova Scotia College of Geographic Sciences, located nine kilometres west.

The *Centre of Geographic Sciences (COGS)* division of AVC, amalgamates programming in the Geomatics and Information Technology areas into one cohesive unit focused on high technology programming and industry training. In 2012, COGS became part of the *NSCC's School of Trades and Technology*.

To Prospective Employers,

We are delighted to introduce the Class of 2024, who are graduating from the NSCC Centre of Geographic Sciences (COGS). Our graduates are equipped with an abundance of talent that they can offer to the global geomatics sector. They are renowned worldwide and continue to make significant contributions to the ever-changing landscape of geosciences. Our small class sizes provide engaging interaction with faculty, who prepare graduates to hit the ground running with currency and focus on real-world problems and solutions.

I wish this year's graduates the best of success in their careers. I also encourage organizations to consider our graduates as today's leaders in geographic sciences. 🎓

Gord MacKenzie

Principal, Annapolis Valley Campus, NSCC

This presentation provides a glimpse into the backgrounds of our 2024 NSCC COGS graduates. Our programming prepares learners for projects and challenges they may face in various Geospatial and IT sectors. We maintain the currency and relevance of our programs by fostering strong ties with industry partners, promoting team collaboration, and actively soliciting feedback from our students and alumni. Our students are equipped with strong technical skills, digital literacy, and hybrid competencies to tackle real-world problems. We appreciate your continued support in collaborating with us and providing learning opportunities for our students to make their experience relevant to their future line of work.

Monica Lloyd

Academic Chair, COGS, School of Technology & Environment

Within the COGS and NSCC community, we take great pride in our commitment to providing students with a comprehensive education in a practical learning setting. Our courses are meticulously designed to address real-world challenges, and our primary focus is on nurturing the skills that employers consistently emphasize as essential for success. This year's COGS program graduates carry forward a rich legacy of producing high-calibre individuals, contributing to a tradition of excellence that spans generations. I am confident that they will exemplify the outcomes of their training on a global scale, both in Canada and internationally.

Andrew Lafford

Dean, School of Technology and Environment, NSCC

2023-2024 COGS Graduate Profiles

Geomatics Engineering Technology (Diploma) – page 8

Kolade Akanji	PGD Surveying & Geo-Informatics – *Federal University of Technology Akure*
David Coady	Cert. Survey Technician – *COGS*
Mitchell Doiron	Cert. Survey Technician – *COGS*
David Kennedy	Cert. Geomatics Engineering Technology – *COGS*
Ashia LeBlanc	Cert. Geomatics Engineering Technology – *COGS*
Alex Pineo	Cert. Survey Technician – *COGS*
Jonah Pye	Cert. Electronic Engineering Technician - *NSCC*

Geographic Information Systems (Graduate Certificate) – page 13

Joseph Adeyeye	Post Graduate Cert. Environmental Management and Assessment – *Niagara College*
Sarah Andrews	B. Computer Science (Hons) – *Concordia University*
Zhikal Baqi	B.Eng. Civil – *University of Sulaimani*
Ashwin Chandrasekar	Post Graduate Dip. Project Management – *Conestoga College*
Kowin Chen	B.A. – *McGill University*
Freya Clark	B.Sc. (Maj) Environmental and Natural Resources (Min) Forestry – *University of New Brunswick*
Mamadou Coulibaly	M.Sc. Remote Sensing & GIS – *Centre de Recherche et d'Application en Télédétection (CURAT)*
Eric Duplessis	B.Sc. Biology - *University of New Brunswick*
Ashlyn Durrant	B.Sc. Geography – *University of Lethbridge*
Amy Hazlett	B.A. History – *Saint Mary's University*
Ben Herringer	B.Sc. Human Nutrition – *St. Francis Xavier University*
Danielle Jones	B.Sc. Biology – *Dalhousie University*
Abubakar Lasisi	B.Tech., Physics – *Ladoke Akintola University of Technology*
Brendan MacDonald	B.Bus. Admin., Marketing – *St. Francis Xavier University*
Martha Magaji	B.A. Geography – *University of Manitoba*
Chisom Okereke	B.Sc. – *Nnamdi Azikiwe University Awka, Anambra State Nigeria*
Joseph Martin Owusu	B.Sc. Geomatic Engineering - *Kwame Nkrumah University of Science and Technology, Kumasi, Ghana*
Cody Penney	B.Sc. (Hons), Environmental Science – *Memorial University*
Jordan Power	B.Bus. Admin. – *Memorial University*
Sanita Richards	B.Sc. Surveying and GIS – *University of Technology, Jamaica*
Alison Rupert	B.Sc. in Env. Sci., Minors in GIS, Physics and Geography – *Mount Allison University*
Sana Shamsher	ALM (Master's) in Sustainability – *Harvard Extension School*
Gordon Slater	B. Bio-Resource Mgmt., Env. Mgmt. – *University of Guelph*

Kale Smith   B. Computing – *University of Guelph*
Cameron Swan   B. Computer Science – *Dalhousie University*
Corey Thorne   B.Sc. Mathematics and Economics – *Acadia University*
Reuben Walker   B.A. Geography – *Simon Frasier University*
Jasper Wong   B.A. Physical Geography, Remote Sensing – *York University*

GIS – Cartography and Geovisualization (Diploma) – page 28

Rebecca Betts   Master of Applied Science - *Dalhousie University*
Dollie Campbell   M.Sc. Applied Sciences – *Saint Mary's University*
MacKenzie Foster   B.Sc. Environmental Studies – *Saint Mary's University*
Margaret Greeno   Diploma in Nat. Resources Environmental Technology – *NSCC*
Megan O'Brien   B.Sc. Marine Biology - *Dalhousie University*
Samuel Smith   Programmer Analyst Diploma – *College of the North Atlantic*
Gwendolyn N. Stanhope   Post Degree Diploma: Applied Coastal Ecology - *Coast Mountain College*

GIS – Remote Sensing (Graduate Certificate) – page 33

Anna Agosta G'meiner   M.Sc. Physical Geography – *McGill University*
Sarah Barnes   B.Sc. Physics – *Acadia University*
Arun Biju   B.Eng. Civil – *Kerala Technical University*
Vid Feher   B. Community Design - *Dalhousie University*
Ryan Froude   B. Applied Comp. Sci. - *Dalhousie University*
Colin Minielly   M. Env. and Sustainability - *University of Saskatchewan*
Graham Rice   B.Sc. (Maj) Astrophysics (Min) Math. - *Saint Mary's University*
Anderson Vasconcellos Amaral   M.Sc. Physical Geography - *University of Sao Paulo (USP)*
Daniel Yabar   M.Sc. Watershed Management - *Centro Agronomico Tropical de Investigacion y Enseñanza*

GIS Technician (Certificate) – page 39

Daniel Boates   GIS Technician (Certificate) – *NSCC*
Ian Downie   GIS Technician (Certificate) – *NSCC*
Kate Goodwin   GIS Technician (Certificate) – *NSCC*
Rory Innes   GIS Technician (Certificate) – *NSCC*
Alexander Kippenhuck   GIS Technician (Certificate) – *NSCC*
Kelsey Martin   Natural Resources Environmental Technology – *NSCC*
Isaac Sampson   GIS Technician (Certificate) – *NSCC*
Jenna Scott   GIS Technician (Certificate) – *NSCC*

Geospatial Data Analytics (Graduate Certificate) – page 44

Nicolas Beauchamp	B.Sc. Environmental Science & Environment, Sustainability, and Society – *Dalhousie University*
U Tato' Alre' L Crisanto	B.Comm. Finance – *Saint Mary's University*
Tiana Gallo	B.Sc. (Maj) Earth Science (Min) Physics – *Memorial University*
Karlos Lao	B.A. (Hons) Geography & Commercial Aviation Management – *Western University*
Donghui Li	B.Eng. – *Huanzhong University of Science and Technology*
Megan MacDonald	B.Sc. (Hons) Earth Sci. & Physics – *Dalhousie University*
Alex Moss	B.Eng. Mineral Recourse – *Dalhousie University*
Laura Raposo	B.Sc. Marine Biology – *Dalhousie University*
Mira Rayson	B.A. Sustainability – *Dalhousie University*
Adam Savory	Grad. Cert. Geospatial Data Analytics – *COGS*
Owen Smith	B.Eng. Mechanical – *Dalhousie University*
Amber Vanderdoe	B.Sc. (Hons) Forensic Sci. & Biology – *Trent University*

IT Programming (Diploma) – page 51

Justin Bishop	B. Bus. Admin. – *Acadia University*

Marine Geomatics (Graduate Certificate) – page 53

Aditya Dabhi	Post Graduate Certificate (Aquaculture) – *Fleming College*
Nasir Kolapo Idowu	B. Technology – *Bells University*
Basil Manam Kunnan	B. Technology in Civil Engineering – *University of Kerala*
Albert Okon	B. Engineering – *Akwa Ibom State University*
Amy Watson	Marine Geomatics (Graduate Certificate) - *NSCC*

Survey Technician (Certificate) – page 57

Aidan Bouchard	Survey Technician (Certificate) – *NSCC*
William Bryanton	Survey Technician (Certificate) – *NSCC*
Laura Crosby	B.Sc. Chemistry – *Mount Saint Vincent University*
Brandon Drummond	Intro to Surveying Certificate Survey Technician – *NSCC*
Traeic Huntley	Survey Technician (Certificate) – *NSCC*
Jeron Lloyd	Master of Technology Entrepreneurship & Innovation – *Saint Mary's University*

Program Overview

Geomatics Engineering Technology (Diploma)

Typically, *Geomatics Engineering Technology* graduates find employment in both the private and public sectors of the geomatics industry throughout North America. These would include construction companies, private survey firms, engineering firs, environmental agencies, resource exploration companies and survey equipment sales companies. Employment opportunities have been available in all provinces and territories of Canada.

Topics in the second year include:

- Communication and teamwork skills
- Advanced positioning methods and geodetic concepts
- Quality control procedures
- Engineering design, site layout, and plan creation
- Data manipulation of geospatial data in CAD and GIS
- Advanced measuring techniques with drones and laser scanners
- The Surveying Profession

Skills offered by Geomatics Engineering Technology graduates include:

- Strong emphasis on team building skills and exercises
- Hands-on training on state-of the-art Geomatics equipment and software
- Practical exercises which are similar to real-world projects

Troy Greene
Geomatics Engineering Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-584-2101
E-mail: Troy.Greene@nscc.ca

(Seven of the 14 *Geomatics Engineering Technology* students chose to be included in this publication)

Kolade Akanji

Strong work ethic, responsible and reliable

Education

2024 – Geomatics Engineering Technology
COGS – NSCC, Lawrencetown, NS
2023 – PGD in Surveying & Geo-informatics
Federal University of Technology Akure – Ondo State, Nigeria
2019 – Diploma in Surveying & Geo-informatics
Kwara State Polytechnic – Ilorin, Kwara State. Nigeria

Skills

- Experience in the field using Leica level, Total station and GPS
- Experience in the field using a Trimble robotic Total station
- Experience using AutoCAD
- Experience in the field using a Faro laser scanner
- Experience in the class with Civil3D and Microsoft Excel
- Experience in the class with Faro Scene and MicroStation
- Comfortable with fieldwork in various weather conditions
- Ability to work well under pressure
- Good communication and listening skills
- Fluent in English and attempting to learn French and Spanish

Work Experience

2023-Present– Order Picker
Sobeys
2021-2023 – Survey Assistant
Raylands Geo-Links
  o Experience around Building construction layout
  o Operated on a team in assisting on all survey equipment and jobs
2017-2021 – Field Surveyor
Planix Spatial Technologies Ltd
  o Cadastral, topographic and layout surveys

Awards, Achievements & Other Notes

- WHMIS Certified
- OH&S Certified
- Willing to travel and/or relocate

David Coady

Hardworking and passionate team player with a love of the outdoors

Education

2024 – Geomatics Engineering Technology
COGS – NSCC, Lawrencetown, NS
2023 – Survey Technician Certificate
COGS – NSCC, Lawrencetown, NS
2023 – Global Energy Transition Summer School Certificate
Hanze University, Groningen, Netherlands

Skills

- Motivated
- GNSS
- Trimble, Leica, Carlson
- GIS Applications- Global Mapper, ArcGIS, QGIS
- Drafting- AutoCAD, Civil3D, Trimble Business Center

Work Experience

2023-YEAR – Survey Assistant
DesignPoint Engineering
2015-2013 – RMT
Massage Experts
  o Senior massage therapist providing therapeutic massage for client health

Awards, Achievements & Other Notes

- Member of Canadian Axe Throwing Team at 2019 Worlds Competition in Sweden
- First Aid / CPR-A
- Class 5 Driver Licence
- RPAS -VLOS- Basic
- UK Drone Operator Certificate
- Radio Operator Certificate – Aeronautical
- Small Craft Operator Card- Marine
- CN Rail- On Track Safety Certificate
- WHMIS

Mitchell Doiron

Hardworking and passionate team player with a love of the outdoors

Education

2024 – Geomatics Engineering Technology
   COGS – NSCC, Lawrencetown, NS
2023 – Survey Technician Certificate
   COGS – NSCC, Lawrencetown, NS

Skills

- Used Levels, total station, RTK on various jobs
- Used Topcon, Leica, Trimble and Carlson Equipment
- Experience working on several road/highway jobs
- Experience working on Pipe jobs
- Experience with operating heavy machinery
- Experience hydro-seeding across Nova Scotia
- Experience as a Concrete laborer on bridges
- 4 years of chainsaw use experience
- Experience with Civil 3D, AutoCAD and Carlson Civil Suite
- Valid driver licence

Work Experience

2022-2023 – Laborer/Operator
   Ron Chisholm Hydro-Seeding
   o Experience with road mulching jobs, pipe jobs, Landscaping and hydro-seeding
2023-Current Surveyor
   Nova Construction Company Ltd
   o Layout for roads, bridges and topographic surveys using Topcon and Trimble

Awards, Achievements & Other Notes

- WHMIS
- Construction safety training
- OH&S training
- Fall Arrest training
- DNA Orientation
- Basic drone Licence

David Kennedy

I'm good at working in team environments to ensure work gets completed properly and efficiently

Education

2024 – Geomatics Engineering Technology
   COGS – NSCC, Lawrencetown, NS

Skills

- Terrestrial data collection
- Tech savvy
- Critical thinker
- Good with time management
- Adaptable worker
- Problem-solving
- Excel and other Microsoft software experience

Work Experience

2016-2020 – Plumbing and Heating Technician
   Department of National Defence
   o Maintained and fixed water/gas/steam/sewer systems
2011-2016 – Aerospace Telecommunications and Information Systems Technician
   Department of National Defence
   o Worked with computer systems as well as radar systems

Awards, Achievements & Other Notes

- WHMIS
- Beginner drone Licence
- Survey Technician Certificate
- Military Trade Certificates

Ashia LeBlanc

Independently motivated with a desire to learn and attention to detail

Education

2024 – Geomatics Engineering Technology
   COGS – NSCC, Lawrencetown, NS
2023 – Survey Technician Certificate
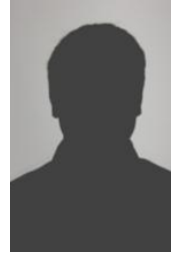   *COGS – NSCC, Lawrencetown, NS*

Skills

- Terrestrial surveying data collection
- Drafting in Civil3D, Carlson, and AutoCAD
- LiDAR processing
- Excel and other office applications
- Instrument calibration
- GIS applications
- Critical thinking and working in teams

Work Experience

2023 – Survey Assistant
   Challenger Geomatics
   o Surveying in small groups or on my own. Project types varied anywhere from construction to legal.
2016 – 2022 Snowboard Instructor
   Nova Ski Limited
   o Instructing beginner to intermediate snowboard lessons. Managing small to large groups as well as private lessons

Awards, Achievements & Other Notes

- CASI Level 1
- Snowboard Instructor
- WHMIS and OH&S Certificate
- Nova Scotia Class 5 Driver Licence
- Fall Arrest Protection

Alex Pineo

I'm a hardworking individual that can learn on the fly

Education

2024 – Geomatics Engineering Technology
   COGS – NSCC, Lawrencetown, NS
2023 – Survey Technician Certificate
   COGS – NSCC, Lawrencetown, NS
2020 – Plumbing Program Certificate
   Kingstec – NSCC, Kentville, NS

Skills

- Problem solving
- Using Trimble and Leica GPS and Total Stations
- Ground Disturbance 201 and Confined Space Certifications
- Plan reading skills
- Basic RPAS pilot Certificate

Work Experience

2023-2023 – Junior Surveyor
   Inline Group Inc
   o Worked alone and with crew to Provide layouts, as-builts and support to clients

Jonah Pye

I am a hard worker, with a good work ethic, and always ask questions

Education

2024 – Geomatics Engineering Technology
COGS – NSCC, Lawrencetown, NS
2023 – Survey Technician Certificate
COGS – NSCC, Lawrencetown, NS
2019 – Electronic Engineering Technician Certificate
NSCC, Amherst, NS

Skills

- Proficient with Trimble, Carlson, Leica RTK equipment
- Drafting in AutoCAD, Carlson, and Civil 3D
- Terrestrial data collection, Total station, GNSS Capture
- 3D software like Context capture and Scene
- Collecting and processing LiDAR data
- Proficient in GIS software (QGIS, ArcGIS Pro)
- Proficient with Microsoft products (Word, Excel, etc.)
- Good with time management
- Reading Plans
- Can work in a team environment

Work Experience

2023 – Survey Assistant
Macmaster Surveys
- o Assisting a Land Surveyor with various legal surveys talking with costumers

Awards, Achievements & Other Notes

- WHMIS and OH&S Certified
- Basic drone licence
- Class 5 Driver Licence
- Survey Technician Certificate
- Valid Canadian passport
- A completed cohort of Katimavik
- Willing to relocate

Program Overview

Geographic Information Systems (Graduate Certificate)

The *Geographic Information Systems* concentration within the Advanced Geographic Sciences program prepares students to join the workforce in roles such as GIS Specialists or GIS Analysts, etc. Analysis and programming are emphasised in the program. The message we receive from employers is that our graduates bring with them a wide range of experience and are ready to work.

The Class of 2024 continues these traits: a variety of undergraduate backgrounds (biology, computer science, earth/environmental sciences/studies, ecology, engineering, geography, geology, marine sciences, and mining) to which these students have added abilities to implement GIS technologies.

The Centre of Geographic Sciences provides students with a unique atmosphere in which to study GIS as our site is completely focused on geomatics disciplines. The opportunity for students to learn from experts in a variety of fields, such as Remote Sensing, Geospatial Data Analytics, IT, Planning, Surveying, & Marine Geomatics, is widely exploited. Our program has a common first term in which fundamentals for each concentration are explored. In our second term, students have the opportunity to enroll in electives in many of these fields. As a result, our students have a wide variety of expertise enabling them to begin their careers on the run.

I think you will be impressed by the credentials and enthusiasm of the students profiled on the following pages.

Enjoy the read!

David MacLean
GIS Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-584-2088
E-mail: David.MacLean@nscc.ca

(28 of the 33 *Geographic Information Systems* students chose to be included in this publication)

Joseph Adeyeye

Combining meteorology, environmental management, and GIS, leveraging data to drive environmental insights effectively

Education

2024 – GIS Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2023 – Post Grad. Cert. Enviro. Mgmt. and Assessment
  Niagara College, Niagara-On-the-Lake, Ontario
2011 – Bachelor of Agricultural Economics
  Obafemi Awolowo University, Ile Ife, Nigeria

Skills

- GIS: ArcGIS Pro, ArcGIS Online, Survey123, ArcGIS Survey123, ArcGIS Field Maps, ModelBuilder
- Programming: HTML, CSS
- Field Work: Field data collection and analysis, Sampling, Environmental monitoring, Phase 1 and Phase 11 Environmental Site Assessment, Soil sampling/testing and report writing
- LiDAR Analysis: LASTools, TerraScan

Work Experience

2023 – Environmental Officer Intern
  Hamilton Health Sciences
  o I conducted a comprehensive inventory of all utility rooms within the hospital with detailed report
2015-2022 – Dept. Head, Synoptic. Meteorological Officer
  Nigerian Meteorology Agency
  o Systematically and accurately collected weather data, monitored and maintained weather instruments to ensure the reliability and precision of the collected data
2014-2015 – Agriculturist, Livestock and Fish Farming
  Mortlad Farms
  o Established/managed a fish and livestock farm, cultivated fish and livestock for commercial purposes, ensuring optimal production practices

Awards, Achievements & Other Notes

- WHMIS & OH&S Certified
- Honours List Spring 2023 – Niagara College
- Ongoing learning through Esri E-Learning
- Valid Class 5 Nova Scotia Driver licence
- Willing to relocate

Sarah Andrews

Technology professional with a passion for geography and strong leadership and consulting skills

Education

2024 – GIS Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
1997 – Baccalaureate in Computer Science, Honours
  Concordia University, Montreal, QC

Skills

- Leadership: manager and team leader
- Consulting: strong relationship-builder, client advocate
- Communication: clear and confident style
- Bilingual: English & French
- GIS Tools ArcGIS Pro, ArcGIS Online, QGIS, CATALYST Focus
- Programming: Python, JavaScript, Salesforce Apex, some C#
- Scripting: HTML, CSS, SOAP, REST, XML, JSON
- Databases: MS SQL, MySQL, PostgreSQL, Oracle

Work Experience

2017-2023 – Technical Account Director
  Salesforce
  o Led a team of Technical Account Managers serving a top-3 US telecom
2013-2017 – Manager and Salesforce Architect
  Diabsolut
  o Managed consultants and developers. Accountable for all project architecture, design, and delivery
2009-2013 – Software Architect, Senior Consultant
  Buzz solutions
  o Analyzed, designed, and implemented custom CRM solutions for clients

Awards, Achievements & Other Notes

Volunteer Work:
- Fondation Jacques de Champlain: Salesforce consulting and development
- Scouts Canada: Group Commissioner
- Water First: Salesforce consulting

Zhikal Baqi

Analytical & calm, I value connection, excel in challenges; task-oriented, optimistic, & a nature enthusiast—blending logic with passion

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2015 – B.Eng. Civil
University of Sulaimani, Sulaymaniyah, Iraq

Skills

- ArcGIS products (ArcGIS Pro, ArcGIS Online, Survey123, FieldMaps, StoryMap, QuickCapture, etc.)
- pgAdmin and Oracle Cloud
- RStudio (R scripts)
- Visual Studio (python, HTML)
- QGIS (PyQGIS, SQL)
- CATALYST (PCI Geomatics)
- MicroStation (LiDAR); AutoCAD, SketchUp
- Microsoft Office (Word, Excel, PowerPoint, Outlook, Office365, SharePoint)
- photoshop, Acrobat
- Languages other than my mother tongue Kurdish (English & Arabic)

Work Experience

2020-2023 – Civil Engineer
Sharp Soft Company Ltd
o coordinating projects, overseeing payment and project timelines, preparing all administrative aspects
2019-2020 – Field Coordinator
THW (Technisches Hilfswerk)
o Provide technical support in terms of construction implementation, report, follow up, assist in planning and sequencing construction operations
2017-2019 – Site Engineer
Balla Group
o construction supervision and estimation, recruiting suitable contracting parties, ensuring project implementation according to design

Awards, Achievements & Other Notes

- WHMIS and OH&S Certification
- Several Esri e-Learning
- Valid Nova Scotia Class 5 Driver Licence
- IELTS academic overall score 7

Ashwin Chandrasekar

Architect with project management expertise, pursuing GIS, ready to transform ideas into innovative spatial solutions.

Education

2024 – GIS Graduate Certificate – *COGS, Lawrencetown, NS*
2023 – Project Management Graduate Certificate
Conestogsa College, Brantford, ON
2020 – B.Arch. – *Anna University, Chennai, India*

Skills

- GIS: ArcGIS - (Pro, Online, Instant Apps), QGIS
- Remote Sensing: PCI Geomatica, Bentley MicroStation
- Programming: Python, HTML, R Studio – Basics
- Database Management: PostgreSQL, Oracle Cloud - Basics
- 3D Modelling: Autodesk - (AutoCAD, Revit), SketchUp
- Rendering: V-ray, Twin Motion, Lumion, Photoshop
- Microsoft: Word, Excel, Power Point
- Artificial Intelligence: OpenAI, Dall - E, Nero AI, Mid Journey

Work Experience

2020-2022 – Junior Architect – *Bala Architects and Interior Designs*
o Oversaw work of sub-contractors, conveyed updates and managed construction administration and value engineering processes, Managed projects from concept through delivery, Prepared project documentation and submittal packages
2018-2019 – Internship Trainee – *NEEVH CONSULTANT*
o Prepared and submitted requests for proposals
o Recommended minor adaptations and modifications to complete working drawing sets
o Learned perfect rendering techniques
2018 – Internship Trainee – *Aron John Designs*
o Assisted in planning and drafting contemporary projects like residential, commercial buildings
o Managing the clients and site supervision was an added advantage, Prepared and submitted requests for proposals

Awards, Achievements & Other Notes

- Academic Project with AGRG in DJI M300 L1 Data
- Advanced Pilot certificate - (RPAS), (VLOS)
- Certified Associate in Project Management (CAPM)
- Standard First Aid & CPR/AED level C, WHMIS & OH&S
- Accredited by Council of Architecture, India
- Esri - 25+ hours e-learning courses, 4 MOOCs

Kowin Chen

Committed to learn more about the GIS industry

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2023 – Bachelor of Arts
McGill University, Montreal, QC

Skills

- GIS: ArcGIS Pro, ArcGIS Online, ArcMap
- Programming: Python, Java, HTML, CSS, JavaScript, QGIS
- Data Analysis: RStudio
- Database Management: PostgreSQL, Oracle
- Remote Sensing: CATALYST Focus, ENVI, MicroStation
- Microsoft: Excel, PowerPoint, Word

Work Experience

2020 – Customer Service Associate
National University Hospital
  - Assisted patients with appointment booking and inquiries
2019-2020 – Guard Commander, Military Police Specialist
Singapore Armed Forces
  - Part of a security team guarding a high-security air force installation

Awards, Achievements & Other Notes

- Honours standing (fall 2023)
- WHMIS and OH&S Certified
- Completion of various Esri E-Learning courses
- Various gold medals in collegiate dragon boating competitions

Freya Clark

Hardworking, self-motivated community builder inspired to use GIS applications and data visualization to solve problems and create connection.

Education

2024 – GIS Graduate Certificate – *COGS, Lawrencetown, NS*
2021 – B.Sc. (Maj) Environment and NR (Min) Forestry
University of New Brunswick, Fredericton, NB

Skills

- Esri: ArcGIS Pro, ArcGIS Online, StoryMaps, Survey123, Field Maps
- Open Source: QGIS, RStudio
- Programming: HTML, CSS, JavaScript, Python, SQL, R
- Database management: PostgreSQL, Oracle
- Remote Sensing: PCI Geomatica, MicroStation, Terrasolid/TerraScan
- Research: Field work planning, field data collection, analysis
- Writing: Funding application, academic paper, report writing
- Languages: English and French
- Other skills: Salesforce experience, project, and employee management experience

Work Experience

2022-2023 – Stewardship Coordinator
Nature Trust of New Brunswick
  - Managed 1/3 of over 70 nature preserves, large projects, and Stewardship Technicians. Created public facing maps
2019-2020 – Stewardship Technician
Nature Trust of New Brunswick
  - Planned and participated in field work, managed volunteers and interns, created public facing maps
2017-2019 (Summers) – Forestry Technician
Medway Community Forest Co-op
  - Participated in field work, planned and executed outreach and education events, created maps for field work

Awards, Achievements & Other Notes

- WHMIS and OH&S Certification
- Currently maintain honors standing at COGS
- Valid Class 5 New Brunswick Driver Licence
- Numerous Esri e-training course certificates
- Speak French and English
- Experienced with field work and working long hours

Mamadou Coulibaly

A dedicated GIS and programming enthusiast looking for a challenge in the geospatial industry to unleash my full potential

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2019 – M.Sc. Remote Sensing and GIS
Centre de Recherche et d'Application en Télédétection (CURAT), Abidjan, Côte d'Ivoire
2015 – Bachelor in Earth Sciences
Université Félix Houphouët Boigny, Abidjan, Côte d'Ivoire

Skills

- Programming languages: Python, JavaScript (HTML/CSS), SQL, PL/SQL, ArcGIS Arcade, R
- GIS: Esri (ArcGIS Pro, ArcGIS Online, ArcGIS Instant Apps, ArcGIS StoryMaps, ArcGIS Dashboards) and QGIS
- Mobile GIS: ArcGIS Survey123, QuickCapture, Field Maps
- Database management: Oracle database/Oracle Spatial, PostgreSQL/PostGIS
- Remote Sensing: PCI CATALYST (orthorectification, classification, enhancement), Sentinel Application Platform (SNAP), Envi (image fusion techniques)
- Bilingual in French and English

Work Experience

2021 - 2023– Geographic Information System and Digital Solutions Assistant
Bouaké's City Hall
  o Led GIS and digital initiatives for the EU-funded "Bouaké Sustainable City" project, enhancing urban infrastructure monitoring and mapping
2021 – Drone Pilot
African Tecno Lab
  o Piloted drones for inspections of electrical pylons
2019 - 2020– Geomatics Engineer
Institut National de la Statistique
  o Designed detailed maps for the 2019 Ivorian Population Census, enabling efficient, and precise data collection

Awards, Achievements & Other Notes

- Esri Canada Centres of Excellence Student Associate
- WHMIS, OH&S certificates
- Vice President of Services, Student Association
- 15+ Esri e-Training certificates

Eric Duplessis

Hard-working problem solver, meticulous and detail oriented, always looking to learn and build new skills

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2020 – B.Sc. Biology
University of New Brunswick – Fredericton, NB

Skills

- ArcGIS Pro, ArcGIS Online
- QGIS
- Database management with SQL
- Python, ArcPy, R/RStudio
- HTML, CSS
- Academic Research
- Customer Service

Work Experience

2016-2020– Animal Care Attendant
University of New Brunswick Aquatics Lab
  o Responsibilities included fish husbandry, maintenance and construction of aquatic systems, and assisting in graduate research
2019 – Graduate Research Assistant
University of New Brunswick
  o Responsibilities included, Data Collection, Field Sample Collection, Parasite Screening

2023-2024 – Rx Assistant
MacQuarries Pharmasave
  o Responsibilities included, filling prescriptions, customer service, customer billing and insurance

Awards, Achievements & Other Notes

- Organizer of the 2019 Angel Tree Gift program (Hope City Church, Fredericton)
- ESL Tutoring (2012-2015)
- 2018 Ironman of the year (UNB Ironmen Rugby Club)
- 2018 MVP back (Loyalist Rugby Club)
- UNB Ironmen Rugby Club Treasurer (2018)

Ashlyn Durrant

Enthusiastic to bring my diverse skillset, dedication, and strong work ethic to a geospatial career

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2021 – B.Sc. Geography
University of Lethbridge, Lethbridge, AB

Skills

- ArcGIS Suite: Pro, Online, Enterprise
- Open-source GIS: QGIS, SAGA
- Remote Sensing: ENVI, CATALYST, Google Earth Engine
- Programming: Python, R, JavaScript, HTML, CSS, Arcade
- Database Management: PostgreSQL, Oracle
- Designing, updating, querying, and managing relational databases
- Performing spatial analyses and developing spatial models
- Organizing and performing field data collection
- Creating maps and other data visualizations
- Self-directed learning and resourcefulness

Work Experience

2019 - Present – Server
Paradise Canyon Golf Course
- o Delivers excellent customer service. Responsible for opening/closing, and training new employees for success
2018 – Server
49 Degrees North Pizza
- o Server in busy national park. Connected with visitors and shared knowledge of geography and wildlife
2017 – Corn Research - Summer Field Tech
Select People Solutions
- o Conducted detail-oriented field work in a research setting, meeting client needs

Awards, Achievements & Other Notes

- Several Esri E-Learning certificates
- Dean's honour list (2020, 2021)
- Member of the Canadian Association of Geographers
- Member of the Canadian Remote Sensing Society
- WHMIS and OH&S certification from NSCC
- Esri Canada Centres of Excellence Student Associate

Amy Hazlett

An up-and-coming GIS professional who is interested in continually learning

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2019 – Business Administration Diploma
NSCC - Kingstec Campus, Kentville, NS
2014 – B.A. History
Saint Mary's University, Halifax, NS

Skills

- GIS: ArcGIS Pro, ArcGIS Online, Survey123
- Database Management: pgAdmin, PostgreSQL, Oracle
- Programming: HTML, CSS and JavaScript
- Microsoft: Office365, Outlook, Word, Excel, SharePoint and PowerPoint
- Excellent troubleshooting skills

Work Experience

2019-2023 – Financial Services Representative II
iNova Credit Union
- o Worked the teller line and helped my manager with day-to-day tasks and paperwork
2012-2018 – Shift Supervisor
Lawton's Drugs
- o Supervised a small group of employees will completing other administrative duties as required, including the nightly closing

Awards, Achievements & Other Notes

- A member of the Geomatics Association of Nova Scotia
- Several Esri e-Learning Certificates

Ben Herringer

Aiming to use my GIS skills to help with nature conservation and climate change action

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2019 – B.Sc. Human Nutrition
St. Francis Xavier University, Antigonish, NS
2018 – B.Sc. Human Kinetics
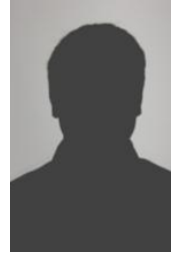*St. Francis Xavier University, Antigonish, NS*

Skills

- Proficient in Esri ArcGIS software
- Open-source GIS software (QGIS, Leaflet)
- Computer programming (Python, HTML, CSS, JavaScript, R)
- Database design and management (PostgreSQL, Oracle)
- Data analysis
- Cartography
- Field work / data collection (Survey123, water monitoring)
- Geoprocessing and modelling (ArcPy and Model Builder)
- Written communication

Work Experience

2023 – Ocean Bridge Ambassador (volunteer)
Ocean Wise
  o Created a participatory mapping project for community members to report ocean pollution and environmental concerns
2021-2023 – Operations Analyst
Spring Loaded Technology
  o Designed and automated processes to improve efficiency, managed sales and marketing data in Salesforce
2019 – Communication and Engagement Intern
StFX Centre for Employment Innovation
  o Created content for website and newsletter, managed social media, assisted with community programs & events

Awards, Achievements & Other Notes

- Living Lakes Canada Water Monitoring Volunteer (2023)
- Apathy is Boring RISE Program Volunteer (2021)
- 4-time Academic All Canadian Student Athlete
- StFX Athletics Leader of Distinction Award
- WHMIS and OH&S Certified

Danielle Jones

A detail-oriented and hardworking problem-solver, with a passion for the environment

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2023 – B.Sc. Marine Biology
Dalhousie University, Halifax, NS

Skills

- GIS: ArcGIS Pro, ArcGIS Online, and QGIS
- Programming: JavaScript, Python, HTML, CSS, R and SQL
- Database Management: Oracle and PostgreSQL
- Remote Sensing: PCI Geomatica/ CATALYST (Orthorectification, Classification, and Enhancement)
- Microsoft Office: Excel, Word, and PowerPoint
- Adobe: Illustrator, Photoshop, and InDesign
- Data Collection: ArcGIS Survey 123, ArcGIS Field Maps, ArcGIS QuickCapture
- Geoprocessing and Modeling: ModelBuilder and ArcPy
- Experience with technical/scientific reports and academic writing

Work Experience

2022-2023 – Fish Technician
Aquatron
  o Responsible for the animal husbandry of various fish and invertebrate species and water quality checks
2022-2023 – Lab Assistant
R. Filgueira Aquaculture Research Lab
  o Assisted in research determining the effect of heatwaves and competition with invasive tunicates on the metabolism of blue mussels
2021 – Museum Assistant
Kawartha Lakes Museum and Archives
  o Researched, cataloged, organized, and created proper storage for artifacts and digitized records

Awards, Achievements & Other Notes

- Valid Class G Driver Licence
- Ongoing Esri e-learning training
- WHMIS and OH&S certified (2023)
- Dean's List 2020 – Dalhousie
- Currently on honours list – NSCC/COGS
- Aquaculture and GIS certificates – Dalhousie
- CACC fish care certification

Abubakar Lasisi

Highly motivated individual poised for challenges and impactful contributions in the world of GIS.

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2018 – Bachelor of Technology, Physics
Ladoke Akintola University of Technology, Oyo, Nigeria

Skills

- Esri products (e.g ArcGIS Pro, ArcGIS Online, StoryMaps, QuickCapture, Survey123, Field Maps, Dashboards)
- Programming knowledge of HTML, CSS, JavaScript, Oracle
- Advanced knowledge of Microsoft products (e.g MS Excel, MS Word, MS PowerPoint etc.)
- Basic knowledge of Geospatial Data Analysis (Data Wrangling, Data transformation, EDA using R-Studio)
- Database design and Management Software (e.g PgAdmin, PostgreSQL)
- PCI Geomatica software (Orthorectification, Enhancement, Classification using CATALYST)
- Basic knowledge of QGIS, Arcade and Notebook
- Python, ArcPy, PyCharm
- Field data collection and technical report writing
- Team player, great communication

Work Experience

2020-2023 – Head Analyst Electricity Bills
Kaduna Power Supply Company
- o Evaluated MDAs' electricity bills, computed monthly costs, and created payment schedules for State Ministry of Finance

Awards, Achievements & Other Notes

- One of Four delegates of Kaduna State Government of Nigeria at the Sustainable Energy for All (SEforALL 2022) event held in Kigali, Rwanda
- Actively involved in the development of the Electricity Bills Management System (EBMS)
- Web application used to automate the processes of analyzing electricity bills
- Certificate of National Service – National Youth Service Corps - March 2020 – A 004228635
- WHMIS and OH&S (2023)
- Valid Class 5 Nova Scotia Driver Licence
- Numerous Esri e-Learning Certificates

Brendan MacDonald

Dependable, hard-working, and eager about growing their passion for visualizing data through GIS

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2019 – B.B.A. Marketing
Saint Francis Xavier University, Antigonish, NS

Skills

- ArcGIS Pro, ArcGIS Online, Survey123, FieldMaps, StoryMaps
- PostgreSQL, Oracle, Notepad++
- Python, Arcade, JavaScript, R
- HTML, CSS, VS Code
- PCI Geomatica CATALYST
- QGIS
- Microsoft Office (all applications)
- Amateur surveying experience

Work Experience

2019-2023 – Line Lead (Supervisor)
Highland Grow Incorporated
- o Orchestrated packaging of cannabis products that were distributed and sold throughout Canada
2018-2019 – Logistics
Canadian Tire
- o Located orders and products in warehouse and retail floor
2015-2018 – Grocery Clerk
Sobeys
- o Stocked and maintained shelves and displays, took inventory counts and unloaded truckloads from distribution centres

Awards, Achievements & Other Notes

- Security Cleared Individual (SCI) status with the Government of Canada
- Volunteer work with Sobeys and Off-Campus Society at StFX
- Experience in river restoration with Habitats Unlimited
- Lover of hockey, football, and basketball (Go Vikings!)
- Keen on adventuring, gardening, and landscaping
- Fascinated by history and genealogy

Martha Magaji

Experienced bilingual GIS assistant and analyst eager to pick up new technologies and collaborate

Education

2024 – GIS Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2022 – B.A. - Geography
  University of Manitoba
  Winnipeg, MB

Skills

- GIS - ArcGIS Pro, ModelBuilder, Fieldmaps, Experience Builder, ArcGIS Insights, QGIS, GeoDa
- CAD - AutoCAD (Civil 3D, Map 3D), Multispec, ENVI,CATALYST (PCI Geomatica),GPS data collection
- Languages - French Oral level C, Government of Canada, Spanish (Intermediate)
- Programming - HTML, CSS, R, Python, Julia, JavaScript, Jupyter Notebooks
- Databases – SQL (SQL*Plus, PostgreSQL), Microsoft Access

Work Experience

2023 – GIS Analyst
  Transport Canada
  - Produced web maps and dashboards covering a number of transportation metrics using ArcGIS Insights
2022 – GIS Analyst
  Manitoba Transportation and Infrastructure
  - Edited segments in Manitoba's Provincial Roads Linear Referencing System (LRS) using the ArcGIS Roads and Highways
2021-2022 – Biodiversity Assistant
  Manitoba Agriculture and Resource Development
  - Compiled, analyzed and visualized species at risk data using GIS and spreadsheet software

Chisom Okereke

A hardworking, goal-oriented team player seeking a new challenge in the geospatial industry

Education

2024 – GIS Graduate Certificate – *COGS, Lawrencetown, NS*
2001 – Bachelor of Science – *Nnamdi Azikiwe University Awka, Anambra State, Nigeria*

Skills

- Programming: HTML, CSS, Python
- GIS: ArcGIS Pro, ArcGIS Online
- DB Management: PostgreSQL/PostGIS, Oracle (SQL*Plus)
- RS: PCI Geomatica: Orthorectify, Classify, Enhance
- LiDAR analysis: LAStools, TerraScan
- Geoprocessing and modeling: ArcPy and ModelBuilder
- ArcGIS data collect: QuickCapture, Field Maps, Survey123
- Data analysis: 'R', Machine Modelling
- Operational Management: Well Workover/Completion activities, Inventory Management
- Microsoft Office: Word, Excel, PowerPoint

Work Experience

2018-2023 – Operations Manager – *Accelerated Compact Energy Solutions Limited (ACES)*
  - In 2022, skillfully managed the completion of two water wells (Agbada 17T & 55) for HHOG, achieving record time, cost savings, and safety (LTI Free)
2013-2018 – Hydraulic Workover Rig Supervisor – *Accelerated Compact Energy Solutions Limited (ACES)*
  - Managed HWO operations, supervised 25+ employees, prepared reports, monitored performance, provided training, ensured safety compliance
2010-2013 – Warehouse Mgr – *Future Concerns Nigeria Ltd.*
  - Managed warehouse operations, oversaw logistics, maintained $15M+ inventory, conducted audits, reported inventory status, and managed schedules

Awards, Achievements & Other Notes

- WHMIS and OH&S certified (2023)
- Basic Fire Prev'n & Fighting Course, BIM Maritime Training
- Basic First Aid Training Course, BIM Maritime Training
- Survival at Sea Course/HUET, H2S Safety Awareness Course, Safety Centre International Ltd., T-BOSIET
- Esri e-Learning training certificates
- IWCF Lvl3 Surface stacking, Drilling, Workover, Completion
- 5 Years of Meritorious award as Operations Manager

Joseph Martin Owusu

A results-driven individual committed to excellence, recognized for the ability to navigate challenges and contribute to the success of projects and teams.

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2019 – B.Sc. Geomatic Engineering
Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Skills

- GIS: ArcGIS products (ArcGIS Pro, ArcGIS Online, Model Builder, StoryMap, Arcade and Notebook, etc.) and QGIS
- Surveying: AutoCAD, GPS, Total Station, Levelling and Handy GPS
- Programming: Python, HTML and CSS
- Database Management: PostgreSQL and Oracle
- Remote Sensing: CATALYST and MicroStation
- Data Analysis: R Studio
- Microsoft Office: Word, Excel, PowerPoint

Work Experience

2019 - 2023 – Assistant Geomatic Engineer
Lands Commission of Ghana
- o Produce cadastral site plans using AutoCAD and GPS, demarcation of land parcels, resolving boundary conflicts and providing records information on land parcels

Awards, Achievements & Other Notes

- WHMIS and OH&S Certified
- Valid Class 5 Nova Scotia Driver Licence
- Numerous certificates for Esri online training courses and MOOC
- Speak English and beginner in French
- Capable of working long hours and in the field at any given time
- Communication

Cody Penney

I am a self-motivated individual who is passionate about increasing the sustainability of our Earth

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2022 – B.Sc. (Honours) in Environmental Science
Memorial University of Newfoundland, Corner Brook, NL

Skills

- ArcGIS Pro / Online
- HTML/CSS
- Python
- QGIS
- PostgreSQL
- Oracle Database
- JavaScript
- Field Maps, Survey123, QuickCapture
- Statistical Analysis using R
- PCI Geomatics / Focus / CATALYST

Work Experience

2021 – Bird Window Collision Surveyor
Memorial University of Newfoundland (Grenfell Campus)
- o Surveyed ground for bird carcasses around buildings and collected them following proper protocol
2022 – Farm Worker
Birchbark Farm
- o Planted, harvested, and sold fresh produce to customers and maintained the farm and chickens

Awards, Achievements & Other Notes

- Wrote an honour's thesis for my undergrad
- University Medal for Academic Excellence (Environmental Science)
- Numerous Esri e-learning certificates
- Numerous academic scholarships
- Attended Leadership Conference in Waterloo (2017)

Jordan Power

Organized and motivated GIS grad, eager to leverage geospatial knowledge for problem-solving

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2023 – B. Business Administration
Memorial University of Newfoundland, St. John's, NL

Skills

- ArcGIS Pro, ArcGIS Online, QGIS, Survey123, Field Maps
- Programming: Python, JavaScript, HTML, CSS, R
- Open Source: Google Earth Engine, GDAL, Geopandas, Conda
- Database Management: PostgreSQL, Oracle
- Remote Sensing: CATALYST/PCI Geomatica
- Strong communication and writing skills
- Microsoft Office: Word, Excel, PowerPoint

Work Experience

2022-2023 – Landscape Horticulturist
Bowering Gardens
o Specialized in the design, installation, and maintenance of landscapes, gardens, and outdoor spaces
2018-2021 – Customer Service Representative
Indigo Park Canada
o Provided customer service, both over the phone and in person, across multiple locations

Awards, Achievements & Other Notes

- Bilingual
- PCOC Boating Licence
- Ongoing training via Esri E-Learning
- Willing to relocate
- Experience working remote

Sanita Richards

Results-driven geospatial specialist excelling in accurate mapping, data analysis, and streamlined workflow management

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2020 – B.Sc. Surveying and Geographic Information Sciences
University of Technology - Jamaica, Kingston, Jamaica
2016 – Diploma in Construction Management
University of Technology, Jamaica, Kingston, Jamaica

Skills

- GIS: QGIS, ArcGIS Pro, ArcGIS Online, Survey123, Arcade, Enterprise GIS
- Database management: SQL/PLSQL, Oracle, PostgreSQL
- Programming languages: HTML, CSS, Python, R
- Remote Sensing: CATALYST, MicroStation CONNECT
- Independent good judgement and decision making
- Attention to detail, professional initiative
- Proficient in documentation, strong communication & interpersonal skills; excellent at problem solving
- Project management and collaboration skills

Work Experience

2022-2023 – Chief Map Data Compiler
National Land Agency
o Oversaw administrative duties, led national map creation, validated data, and guided staff through technical tasks
2016-2022 – Map Data Compiler
National Land Agency
o Generated digital plans, performed quality checks, and transformed coordinate systems for national mapping standards. Additionally, prepared monthly progress reports for management oversight
2014-2016 – Map Maintenance Technician
National Land Agency
o Maintained digital cadastral index, supported valuation activities, and provided land information for internal/external clients. Produced monthly reports for management oversight

Awards, Achievements & Other Notes

- Ongoing learning through Esri E-Learning
- WHMIS & Nova Scotia OH&S certified
- English (Native), French (Basic)
- Willing to relocate

Alison Rupert

Hardworking and motivated student looking forward to working more with GIS

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2023 – B.Sc. (Maj) Environmental Science (Min) GIS, Physics, and Geography
Mount Allison University, Sackville, NB

Skills

- GIS: ArcGIS Pro, ArcGIS Online, ArcGIS Field Maps, ModelBuilder
- Programming: Python, HTML, CSS, JavaScript, R/RStudio
- Database Management: PostgreSQL, Oracle
- Remote Sensing: PCI Geomatica CATALYST
- Microsoft Office: Word, Excel, PowerPoint, Outlook

Work Experience

2023 – Planning and Engineering Summer Student
Town of Quispamsis
- o Digitized town infrastructure and potential developments, created maps for town use and for residents, performed road inspections

2023 – Student Marker
Mount Allison Geography and Environment Department
- o Marked labs for Introduction to Geographic Information Systems, attended frequent meetings with instructor, gained insight on what elements are expected in maps

2020-2023 – Campus Ambassador/Resident Advisor
Mount Allison University
- o Provided campus tours and assisted with events/info sessions promoting the university, aided students in their transition into university

Awards, Achievements & Other Notes

- Heart and Stroke Emergency First Aid & CPR/AED C (2022)
- WHMIS and OH&S (2023)
- NB class 5 driver licence
- Various Esri eTraining courses

Sana Shamsher

A passionate and hardworking team-player interested in applying GIS to make creative solutions

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2024 – Sustainability ALM
Harvard Extension School, Cambridge, MA
2016 – Bachelor of Chemical Engineering and Society
McMaster University, Hamilton, ON

Skills

- GIS: ArcGIS Pro, ArcGIS Online, Survey123, QGIS
- Programming: HTML, CSS, JavaScript, Python, R
- Database Management: PostgreSQL/PostGIS, Oracle

Work Experience

– Assistant Project Manager
- o *ML McDonald*
- o Prepare take-offs and design calculations for construction cost estimates; Help in bidding process and project schedule coordination

– Technical Waste Analyst Intern
City of Hamilton
- o Study to determine efficiency rates of composting program for Hamilton businesses; Developed communication plan, scheduling, inventory requirements and reporting criteria for city-wide rollout of composting program to commercial sector

– Research Assistant Intern
University of Waterloo and Region of Waterloo
- o Inspection, operation, maintenance and backwash protocol optimization of Pilot-Plant filtration system in compliance with plant and region protocols

Gordon Slater

Motivated and looking forward to utilizing my GIS and environmental science skills and knowledge

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2023 – B. Bio-Resource Management (Maj) Environmental Management
University of Guelph, Guelph, ON

Skills

- GIS software: ArcGIS Pro, ArcGIS Online, QGIS, CATALYST Professional
- Programming Languages: Python, R, HTML, CSS, JavaScript, SQL
- Data analytics using R Studio
- Spatial analysis and Geostatistics
- Database management: PostgreSQL, Oracle Database
- Remote sensing: image classification, image enhancement, image corrections
- Microsoft Office: Office365, Excel, Word, PowerPoint, Teams
- Strong written and verbal communication skills
- Forest inventory and plant identification skills

Work Experience

2020-2022 – The Farm at Green Village
Cashier/Sales Associate
- o Managed transactions, assisted with plant care, stocking, cleaning, and maintenance

2019 – University of Guelph Physical Resources
Summer Student Assistant
- o Filed and organized documents. Data entry and analysis of Excel spreadsheets

Awards, Achievements & Other Notes

- University of Guelph Dean's list: 2019-2023
- WHMIS and OH&S certified
- Ongoing training through Esri E-Learning

Kale Smith

Passionate about turning spatial data into compelling stories and creating unique applications

Education

2024 – GIS Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2023 – Bachelor of Computing
University of Guelph, Guelph, ON

Skills

- Programming: HTML, C++, Python, Java, R
- Modular Systems, Interface Design, Use of Databases
- System Analysis, System Design, Algorithms
- GIS: ArcGIS Pro, ArcGIS Online, QGIS, CATALYST, WhiteBox
- Map Visualization, Projections, Data collection
- Modelling, Raster Calculation
- Proficient in Microsoft Office Suite
- Proficient in Adobe Photoshop and Adobe Acrobat

Work Experience

2016-Present – Bakery Clerk
Loblaws Companies Limited, Zehrs
- o Customer service, utilizing various equipment, maintaining stock of bakery items, executing company promotions
2023-Present – Customer Assistant II
City of Guelph
- o Customer service in recreation centres, in person, by email, and by phone. Clerical work, data entry and filing

Awards, Achievements & Other Notes

- Undergraduate Research Project, University of Guelph - Analyzing the Factors of Deforestation in the Amazon using GIS and Logistic Regression
- Various Esri Training Certificates
- Member of Canadian Floorball Association, representing Team Canada internationally
- Ontario Scholar Award (Secondary School)

Cameron Swan

A goal-oriented team player looking to utilize my programming background to solve GIS solutions

Education

2024 – GIS Graduate Certificate – *COGS, Lawrencetown, NS*
2021 – B.Sc. Comp. Sci. – *Dalhousie University, Halifax, NS*
2021 – Dip. IT Web Programming – *NSCC, Halifax, NS*

Skills

- Web Development: JavaScript, React, HTML, CSS, WordPress
- Programming: Python, Java, C#, C, C++, R
- Database Mgmt: PostgreSQL, Oracle, MongoDB, MySQL
- GIS: ArcGIS Pro, ArcGIS Online, QGIS, ModelBuilder
- Data Collection: ArcGIS Survey123, ArcGIS Field Maps, ArcGIS QuickCapture
- Remote Sensing: CATALYST Pro, MicroStation, TerraScan
- Microsoft Office Suite: Word, Excel, PowerPoint, Teams
- Communication: Technical Writing, Poster design, StoryMaps
- Capable of working individually and with a team
- Strong problem solving and leadership skills

Work Experience

2022-2023 – Senior Full-Stack Developer
  Seat of My Pants Productions
  o Developed a database and web application that displays projects the company is working on
2020 – Co-op Software Quality Assurance Engineer
  Modest Tree Media
  o Tested, demoed, and delivered software to many clients including VR simulation software to DND/RCN
2019 – Co-op Business Data Analyst
  Government of Nova Scotia - Department of Internal Services
  o Developed and implemented a custom algorithm to track live servers and keep them updated

Awards, Achievements & Other Notes

- WHMIS and OH&S certified
- Ongoing learning through Esri E-Learning
- Student representative at NSCC
- Student representative at 100th anniversary of Vimy Ridge
- Lifesaving Society Bronze Star
- Class 5 Driver Licence
- Willing to relocate

Corey Thorne

A friendly fit to your GIS workplace

Education

2024 – GIS Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2019 – B.Sc. (Double Major Mathematics/Economics)
  Acadia University, Wolfville, NS

Skills

- Esri software (ArcGIS Pro/Online) & QGIS
- Web Map and Web App development
- Python
- SQL (OracleDB, Postgres)
- R Programming
- Machine Learning
- Business Analytics

Work Experience

2021 – NRFU Collection Agent
  Statistics Canada
  o Follow up field researcher for Census
2019 – Assistant Site Manager
  The Landscape of Grand Pre Inc
  o Management plan and monitoring report maintenance for UNESCO site

Reuben Walker

Passionate about using geospatial technology to uncover new information, and make decisions for the future

Education

2024 – GIS Graduate Certificate
    COGS – NSCC, Lawrencetown, NS
2021 – B.A. Geography
    Simon Fraser University, Burnaby, BC

Skills

- Geospatial analysis
- Database management
- Data analytics
- Programming
- Remote Sensing
- 3D modelling
- Web design
- Data Collection

Work Experience

2020-2021 – Assistant Program Coordinator
    Gordon Neighbourhood House
    o Planned & facilitated community-based programs and events for seniors
2015-2016 – Engineering Assistant (Co-op)
    National Research Council
    o Revised & assembled custom high-redundancy power supplies for frequency & time measurement equipment

Jasper Wong

Leveraging my background in physical geography, remote sensing, and GIS for innovative problem-solving solutions

Education

2024 – GIS Graduate Certificate
    COGS – NSCC, Lawrencetown, NS
2024 – Bachelor's Degree in Specialization of Physical Geography
    York University, Toronto, ON
2024 – Certificate in Geomatics: GIS & Remote Sensing
    York University, Toronto, ON

Skills

- GIS: ArcGIS Pro, ArcGIS Online, Survey123
- ArcGIS Dashboard, ArcGIS StoryMaps
- ArcGIS Enterprise, ModelBuilder, QGIS
- Remote Sensing: PCI Geomatica, Matlab
- Database Management: PostgreSQL/PostGIS, Oracle
- Programming: Python (ArcPy, PyQGIS), SQL, HTML, CSS, JavaScript
- Data Analytics: RStudio, Matlab
- Field Work: Land Surveying (RTK, RT-PPP, Static, traditional levelling, total stations)
- Sampling, Ecological Monitoring

Work Experience

2023 – Asset Planning Summer Co-op
    City of Burlington
    o Involves city's asset data management, spatial analysis, and infrastructure planning using GIS technology
2022 – Land Surveyor Assistance (Summer Intern)
    Delph & Jenkins North Ltd. Ontario Land Surveyors
    o Assists in surveying land, measuring and recording spatial data for property and construction projects

Awards, Achievements & Other Notes

- Standard First Aid Certification
- WHMIS and OH&S Certification
- Environmental & Urban Change Undergraduate Research Award
- Valid Ontario Driver Licence – Class G
- Honours Standing

Program Overview

GIS – Cartography and Geovisualization (Diploma)

In this program you'll create professional, dynamic visualizations and maps using the latest geospatial technologies in GIS, data analytics and graphics applications to support industry decisions. You'll learn to visually communicate a story by researching, preparing, and applying cartographic design practices to a variety of datasets. Throughout the program you'll connect with industry partners, clients, and professional associations.

You learn how to:

- Create and construct engaging data geovisualizations
- Develop 3D visualizations and interactive maps for online and mobile applications
- Use cartographic design, typography, and symbolization
- Design map and visualization production for both print and digital platforms

NSCC-COGS students have been recognized by the CCA (Canadian Cartographic Association), CaGIS (the Cartography and GIS Society), Canadian Geographic, NACIS (North American Cartographic Information Society) and National Geographic for excellence in cartography.

As a cartographer, you will be qualified to work in any sector that requires work with Geographic Information Systems and a has need for data visualizations, including environment, energy and mines, agriculture, forestry, fisheries, health, transportation, tourism, recreation, real estate, journalism, IT, graphic design, academia, publishing, research, municipal, provincial, and federal government offices.

Our graduates work in Nova Scotia and around the world in a variety of mapping industries.

Martha Bostwick
GIS – Cartography and Geovisualization Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-584-2073
E-mail: Martha.Bostwick@nscc.ca

(Seven of the 16 *GIS – Cartography and Geovisualization* students chose to be included in this publication)

Rebecca Betts

I am a multi-disciplinary researcher familiar with biology, forensic science, water resources, telecommunications, and GIS

Education

2024 – GIS: Cartography and Geovisualization Diploma
COGS – NSCC, Lawrencetown, NS
2018 – Master of Applied Science
Dalhousie University, Halifax, NS
2014 – Bachelor of Science and Diploma in Forensic Science
Saint Mary's University, Halifax, NS

Skills

- Familiar with ArcGIS, QGIS, IKE Office
- Map creation and interpretation
- Strong critical thinking
- Strong communication
- Project coordination
- Data management and interpretation
- Water resources and cyanobacteria/blue-green algae knowledge
- Telecommunication knowledge
- Excellent customer service

Work Experience

2022-present – Implementation Coordinator
MOBIA Technology Innovations
   o QC for telecom field data collection in Ontario and Northwest Territories using IKE Office and QGIS
2022– Administrator
MOBIA Technology Innovations
   o Compiled telecom information for permits for Ontario/NWTel/ATCO/Bell/NS Dept of Lands and Forestry
2021-2022 – Field Data Collector
MOBIA Technology Innovations
   o Collected utility pole and span details using IKE field for Develop Nova Scotia water crossing permits

Awards, Achievements & Other Notes

- Volunteer Experience:
  2021-2022 = Halifax Pride
  2019-2020 = Canadian Association for Girls in Science

Dollie Campbell

I am excited to merge my recently acquired skills in map design, programming, and creative ways to present data with my expertise in biological sciences

Education

2024 – GIS: Cartography and Geovisualization Diploma
COGS – NSCC, Lawrencetown, NS
2014 – Master of Science in Applied Sciences
Saint Mary's University, Halifax, NS
2009 – Bachelor of Science in Environmental Studies
Saint Mary's University, Halifax, NS

Skills

- Confident in using ArcGIS Pro/Online and QGIS
- Competent in using various design software: Adobe Photoshop, Illustrator, InDesign
- Experience using various programming platforms: HTML, CSS, Python, and JavaScript
- Proficient in Microsoft Office and Google suite
- Experience in database management using PostgreSQL

Work Experience

2023-2024 – Researcher
Environment and Climate Change Canada
   o Compiling data on the Myxozoan parasite in Canada.
2010-2023 – Commercial Fisher Person (seasonal)
Atlantic Elver Fishery
   o Commercial harvest and husbandry of American eel (glass eels)
2005-2015 – Fisheries Technician
Fisheries and Oceans Canada
   o Expertise in fish handling and husbandry, proficiency in electrofishing, experience in fish capture platforms, adept at collecting biological samples, and skilled in processing for both lake and marine species

Awards, Achievements & Other Notes

- Nova Scotia Driver Licence (Class 5)
- WHMIS/OH&S training
- Standard First Aid with CPR C and AED
- Electrofishing Certification (Crew Supervisor)
- Swift Water Rescue Certificate
- Restricted Operator Certificate (ROC-M)
- Canadian Firearms Safety Accreditation (FAC)
- Canadian Aquatic Biomonitoring Network (CABIN)

Mackenzie Foster

A dedicated, curious, and enthusiastic individual always looking to learn and gain new skills

Education

2024 – GIS: Cartography and Geovisualization Diploma
COGS – NSCC, Lawrencetown, NS
2023 – Bachelor of Environmental Studies; Minor Degree
Saint Mary's University, Halifax, NS

Skills

- ArcGIS Pro, ArcGIS Online, ModelBuilder, QGIS
- Arcade expression language
- Programming languages: HTML, CSS, JavaScript, Python
- Database management with PostgreSQL
- Web Mapping and Open-source cartography software
- Adobe Illustrator, Photoshop, InDesign
- Microsoft Office: Word, PowerPoint, Excel, SharePoint, Teams
- Programming: Python, HTML, CSS
- Public Speaking
- Technical Writing

Work Experience

2020-2022 – Yard Staff
Oceanview Home & Garden
- Plant care and identification, customer service, landscaping

Awards, Achievements & Other Notes

Other Courses:
- Environmental Impact Assessment
- Environmental Management
- Indigenous Experience and Environmental Impact
- Sedimentology

Margaret Greeno

Detail oriented, adaptable, highly motivated individual with a passion for the environmental application of GIS

Education

2024 – GIS: Cartography and Geovisualization Diploma
COGS – NSCC, Lawrencetown, NS
2023 – Diploma in Natural Resources Environmental Technology
NSCC, Bridgewater, NS

Skills

- GIS software: ArcGIS, QGIS
- Field data collection: Garmin, Avenza, Field Maps
- Experience working in remote locations
- Familiarity with Python, HTML, and CSS scripts
- Familiarity with database management: PostgreSQL
- Proficient with Microsoft Office
- Technical report and presentation composition
- Geoprocessing: ModelBuilder and Python
- Adobe Creative Suite: Illustrator, Photoshop, InDesign

Work Experience

2022, 2023 – Forest Technician
Timberland Holdings
- Managed company GIS layers, harvest and road planning and layout, supervise contractors, ecological forestry practices
2020, 2021– Maintenance Labourer
West Hants Municipality
- Maintain municipal properties and interact with community members

Awards, Achievements & Other Notes

- HTML essential training
- CSS Fundamentals certificate
- ArcGIS Notebook Basics certificate
- Learning ArcGIS Python Scripting certificate
- Wetlands Work certification
- WHMIS/OH&S training
- HIGH FIVE certificate
- First-aid training: Level C
- Basic chainsaw and clearing saw knowledge

Megan O'Brien

Motivated, eager to learn, focused on map production and data analysis

Education

2024 – GIS: Cartography and Geovisualization Diploma
COGS – NSCC, Lawrencetown, NS
2023 – B.Sc. Marine Biology
Dalhousie University, Halifax, NS

Skills

- Map Production: ArcGIS Pro, ArcGIS Online, Esri Story Maps, QGIS, LiDAR
- Geoprocessing: ArcPy, ArcGIS Pro ModelBuilder
- Programming: Python, HTML, JavaScript, CSS, RStudio, Arcade
- Database Management: pgAdmin (PostgreSQL)
- Graphic Design: Adobe Photoshop, Illustrator, InDesign
- Report Production: Microsoft Office

Work Experience

2022 – Geographic Information Systems Intern
Nova Scotia Department of Forestry
  o Identified forest land in Nova Scotia best suited for purchase or re-designation as a protected area by the province
2022-2023 – Program Assistant
Shad Canada
  o Managed daily operation of a residential STEM program for 50+ high school students at the University of British Columbia
2022 – Teaching Assistant
Dalhousie University
  o Facilitated an introductory biology lab session once weekly for 30 undergraduate students

Awards, Achievements & Other Notes

- COGS Student Association Vice Present, Communications
- Student Note-Taker for Cartography & Geovisualization Program
- WHMIS and OH&S Training
- Valid Nova Scotia Class 5 Driver Licence
- Dalhousie University Entrance Scholarship

Samuel Smith

Software Developer diving into the world of GIS Technology

Education

2024 – GIS: Cartography and Geovisualization Diploma
COGS – NSCC, Lawrencetown, NS
2016 – Programmer Analyst Diploma
College of the North Atlantic, St. John's, Newfoundland

Skills

- Esri: ArcGIS Pro, ArcGIS Online
- Programming languages: HTML, CSS/LESS, JavaScript, Python, PHP, React
- Database management: Postgres SQL, MySQL
- Microsoft Office (Ender User & Administration)
- Writing: Code/Systems documentation, ISO policy and procedure

Work Experience

2017-2021 – Software Developer/M365 Administrator
SimplyCast Interactive Marketing Limited
  o Debug, maintain and expand core application suite with Angular 1.x and PHP
2021-2022 – React Developer
VERB Interactive
  o Worked on integrated booking solutions for worldwide travel brands, single page and embedded applications

Gwendolyn Stanhope

A creative self-starter with a passion for the environment, looking forward to continuing a career in GIS and data visualization.

Education

2024 – GIS: Cartography and Geovisualization Diploma
COGS – NSCC, Lawrencetown, NS

2023 – Post Degree Diploma: Applied Coastal Ecology
Coast Mountain College, Prince Rupert, BC

2021 – B.Sc. Biology - Forest Sciences, Minor in GIS
University of Victoria, Victoria, BC

Skills

- Programming: Arcade, HTML, Python, JavaScript, CSS, SQL
- Adobe: Illustrator, Photoshop, InDesign
- ArcGIS Pro/Online/Survey123/Notebooks, QGIS, Google Earth Engine
- Database Management: PostgreSQL, pgAdmin
- Ecological Restoration
- Wildlife Management & Habitat Assessment

Work Experience

2023 – Field Biology Technician
Duka Environmental Services
- Coordinated Yukon-wide program featuring remote field work, community outreach, and technical reporting summarizing project implementation, field observations, and taxonomical data

2021-2022 – Program Officer/GIS Technician
Yukon Government
- Performed review of spatial data housed in YG department databases, organized wilderness tourism licensing database, provided cartographic products to colleagues, and gained further experience in data analysis and visualization

2019 – Research Intern - Plant Pathology
NDSU Research Extension Center
- Collected disease and insect pest data for the NDSU plant pathology program, maintained lab instruments and field equipment, and gained experience in field research methodology

Awards, Achievements & Other Notes

- Volunteer: Habitat Acquisition Trust & Greater Victoria Green Tea
- Certification: Amateur Radio Operator
- Certification: Pleasure Craft Operator
- WHMIS and OH&S

Program Overview

GIS – Remote Sensing (Graduate Certificate)

Remote Sensing is a rapidly expanding discipline with wide applications in forestry, geology, defence/intelligence, disaster management, conservation, oceanography, meteorology, urban analysis, and agriculture. Satellite images, sea floor mapping, laser mapping, and airborne photography are some of the technologies involved with Remote Sensing.

Students learn the theoretical basis for remote sensing, image interpretation, digital image processing, and the design and capabilities of remote sensing systems of the past and present. They are encouraged to approach remote sensing challenges using a logical and real-world approach.

Applications of digital data derived from remote sensing systems in various disciplines are discussed and investigated utilizing digital image processing techniques such as orthorectification, mosaicking, colour space transformations, vegetation indices, and automated data processing.

This year, our students come from a wide variety of backgrounds, including environmental sciences, geology, and geography. With such diversity, these graduates are sure to succeed in their endeavours.

Rob Hodder
Remote Sensing Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-584-2070
E-mail: Rob.Hodder@nscc.ca

(All nine of the *Remote Sensing* students chose to be included in this publication)

Anna Agosta G'Meiner

Adaptable and enthusiastic geomatics/environmental scientist, passionate about disrupting industries with remote sensing's endless capabilities

Education

2024 – Remote Sensing Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2016 – M.Sc. Phys. Geog. – *McGill University, Montreal, QC*
2012 – B.Sc. Physical Geography & Enviro Policy & Practice
  University of Toronto, Toronto, ON

Skills

- CATALYST, ERDAS, ArcGIS, Global Mapper, Bentley ContextCapture
- LiDAR processing: Bentley MicroStation, Global Mapper
- GIS: ArcGIS Pro, ArcGIS Online, QGIS
- Experience programming in Python, R, R Studio
- Database Management: PostgreSQL/ PgAdmin
- Excellent technical report writing skills
- GNSS data collection and processing
- Microsoft Office Suite, including Excel
- Lab experience processing and analyzing soil samples
- Field Experience: planning, data collection

Work Experience

2021-2023 – Owner/Operator, Master Carpenter
  AAG Carpentry
  o Worked independently/part of team to complete quality renovation projects with attention to detail
2017-2019 – Research Assoc. – *Bishop's University PerosLab*
  o Assisted in planning/ reporting on multiple projects, compiled reports, processed lab sediment samples
2014-2015 – Teaching Assistant – *Bishop's University*
  o Assisted with lesson preparation/implementation and facilitated field experiences; trained students in laboratory environment (WHMIS and SOPs)

Awards, Achievements & Other Notes

- Bilingual English/French, inter. Spanish, beginner German
- Various Esri E-Learning Certificates
- Emergency First Aid and Level C CPR/AED
- Valid driver licence (Class G), own vehicle
- Assn. of American Geographers Student Pres'n Award
- AASP/Palynological Society McNeilly Student Res. Grant
- McGill University entrance scholarship (2013)
- Douglass Pimlott Award for environmental outreach
- Multiple Citizenship (Canada/EU/USA); willing to relocate
- Basic Drone Licence

Sarah Barnes

Motivated explorer of geomatics and optoelectronics. Always curious and excellent to others

Education

2024 – Remote Sensing Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2022 – B.Sc. Physics
  Acadia University, Wolfville, NS

Skills

- ArcGIS Pro and QGIS
- Programming in Python and JavaScript
- Database creation and maintenance with PostgreSQL, PostGIS
- GNSS surveying with static antenna, RTK
- Terrestrial LiDAR planning, collection, and processing
- Airborne survey planning, dataset production
- Imagery analysis, multispectral and SAR
- CATALYST (PCI Geomatica) Global Mapper, ERDAS Imagine

Work Experience

2018-2023 – Customer Service Representative
  Canadian Tire
  o Interacted closely with customers every day. Given a wide range of tasks
2019-2022 – Teacher's Assistant and Marker
  Acadia University
  o Responsible for helping new physics students make the most of their first university years
2017 – Community Engagement Coordinator
  Inspiring Communities
  o Part of a small team that worked to uncover the needs of our local community

Awards, Achievements & Other Notes

- Willing to relocate
- WHMIS Certification
- OH&S Certification
- Class 5 Driver Licence
- Basic Drone Licence
- Summer research in subatomic physics
- US-Canada Dual Citizenship

Arun Biju

Civil engineer turned remote sensing enthusiast excelling in tech, programming, and data analysis wizardry

Education

2024 – Remote Sensing Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2020 – Bachelor of Civil Engineering
Kerala Technical University, Ernakulam, Kerala, India

Skills

- Programming
- Data Analysis
- Remote Sensing
- Geographic Information Systems (GIS)
- Structural Analysis
- Problem-Solving
- Technical Aptitude
- Project Management
- Communication
- AutoCAD and Drafting

Work Experience

2022-2023 – Geomatics Engineer
Dream Nest Homes
  o Worked a geomatics engineer who excels in project oversight, spatial data collection, and detailed, accurate feasibility reporting

Vid Feher

Motivated, adaptable, detail oriented and loves everything Remote Sensing and GIS

Education

2024 – Remote Sensing Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2022 – Bachelor of Community Design
Dalhousie University, Halifax, NS

Skills

- GIS: Esri, ArcGIS Pro, ArcGIS Online, QGIS
- Remote Sensing Software: PCI CATALYST, ERDAS Imagine
- Python
- Adobe Creative Suite: Lightroom, Photoshop, Illustrator, InDesign
- Public Speaking

Work Experience

2023-2023 – Administrative Assistant
Gyre Immigration
  o Supported minor office tasks through Microsoft Office, client engagement
2021-2022 – Engagement Manager
Saint Mary's University
  o Student engagement support through SMU-PLUS Program at the university language centre
2018-2020 – Go-Kart Mechanic
Kartbahn Racing Inc.
  o Mechanic lead at local go-karting track. Welding, soldering, fabrication, various maintenance

Awards, Achievements & Other Notes

- Focused team player
- Bilingual (Croatian, English)
- Willing to relocate and travel
- Various E-learning Esri Certificates
- International Baccalaureate High School Diploma
- WHMIS/OH&S

Ryan Froude

An adventurous individual who is looking forward to where remote sensing will take him.

Education

2024 – Remote Sensing Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2023 – Bachelor of Applied Computer Science
  Dalhousie University, Halifax, NS

Skills

- Python (ArcPy, Rasterio, Fiona)
- Other languages: Java, JavaScript, HTML/CSS, SQL
- Imagery analysis
- Software: PCI CATALYST, ArcGIS Pros, Erdas Imagine
- Surveying: RTK, Total Stations, static GNSS
- Microsoft Office suite

Work Experience

2023-2023 – Front End Staff
  Truckin' Roll Icecream
  o Prepared and served ice cream to customers; Managed Inventory and handled monetary transactions
2020-2022 – Barista
  Lucky Bean Cafe
  o Prepared and served food and beverages to customers; Managed inventory and handled monetary transactions
2019-2020 – Shipping/Receiving
  Dalhousie University bookstore
  o Managed and received various shipments of new products, ensuring quality control of incoming products

Awards, Achievements & Other Notes

- Drone Pilot Certificate - Basic Operations
- 20+ hours of Esri e-learning courses
- Class 5 PEI Licence
- Willing to travel

Colin Minielly

Creative, intuitive, problem solver, team player, goal and task orientated, always seeking new or additional knowledge.

Education

2024 – Remote Sensing Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2019 – Masters of Environment and Sustainability
  University of Saskatchewan, Saskatoon, SK
2014 – B.Sc. Resource Management
  University of Saskatchewan, Saskatoon, SK

Skills

- Basic RPAS Licence (2021)
- Confident with Esri Products
- Knowledgeable with python and SQL
- Field experience (forestry, agriculture)
- Knowledgeable with surveying techniques

Work Experience

2022 - present – LiDAR Analyst
  Forsite Consultants Ltd.
  o Assisted in processing LiDAR data for various forestry projects using standard practices
2019-2022 – Forest Technician
  Forsite Consultants Ltd.
  o Collected field-based data for various clients using a variety to tools and techniques
2019 – Graduate Student Research Assistantship
  University of Saskatchewan
  o Edited manuscripts and online resources for various projects

Awards, Achievements & Other Notes

- Active executive member of Toastmasters International club
- Registered Professional Forest Technologist (RPFT), SK
- Ongoing GIS training through Esri e-Learning courses
- Driver licence and passport
- Wilderness First Aid
- Willingness to travel and learn

Graham Rice

An enthusiastic team player ready to give my all in this exciting industry!

Education

2024 – Remote Sensing Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2022 – B.Sc. Major in Astrophysics, Minor in Mathematics
Saint Mary's University, Halifax, NS

Skills

- GIS: ArcGIS Pro, ArcGIS Online, QGIS
- Remote Sensing: CATALYST Professional, Global Mapper, Bentley ContextCapture, ERDAS
- LiDAR Analysis: Global Mapper, Bentley MicroStation
- Experienced in map modeling and raster algebra
- Database management experience with PostgreSQL and PostGIS
- Programming: Python, SQL, Arcade, Java
- Field Survey: RTK, Total stations, GNSS Base Station
- Microsoft Products Experience: Excel, Word, Power Point, Teams
- Flight planning experience for multi-rotor RPAS
- Works strongly in teams and independently

Work Experience

2016-2023 – Bakery Clerk
Atlantic Superstore
- o Department multi-tasker, helping in many areas of production and customer service.

Awards, Achievements & Other Notes

- Graduated on Dean's List for outstanding marks
- WHMIS and OH&S Certification
- 40+ hours gaining many Esri e-learning certificates
- Will acquire basic RPAS Licence
- Valid Nova Scotia Class 5 Driver Licence
- Achieved 92% first semester average at COGS
- Willing to gain any additional certifications

Anderson Vasconcellos Amaral

Resourceful and detail-oriented geographer committed to social and environmental justice.

Education

2024 – Remote Sensing Graduate Certificate
COGS – NSCC, Lawrencetown, NS
2021 – M.Sc. in Physical Geography
University of Sao Paulo, Sao Paulo, SP, Brazil
2019 – Grad Studies in Land Surveying, Eng. – *Pirassununga Faculty of Eng. & Surv, Pirassununga, SP, Brazil*

Skills

- Remote Sensing/GIS: ERDAS, PCI CATALYST, ENVI, Global Mapper, ArcGIS Pro, QGIS
- Cloud Computing: Google Earth Engine & Planetary Computer
- Programming and Database management: Python, SQL
- GNSS: data collection & post-processing assessment
- Field Work: planning and execution committed to time, budget, & project demands
- RPAS: flight plan & regs, application, image processing

Work Experience

2022-2023 – Barista – *S*tarbucks, Toronto, ON
- o Offered friendly & effective customer service using genuine communication & interpersonal interaction
2018-2021 – Researcher – *Department of Geography, University of Sao Paulo, Brazil*
- o Collaborated in projects on conservation, landscape ecology, and tropical forest environmental issues
2017-2019 – Geography Teacher – *Colégio Arbos (High School), Santo Andre, SP, Brazil*
- o Guided students to achieve high scores and performance using multiple interpersonal approaches & personalized tools

Awards, Achievements & Other Notes

- Master's dissertation on NR and Environmental Mgmt
- Research grant (fieldwork and data collection). Awarded by the University of Sao Paulo
- Global Land Programme – GLP academic affiliated
- NASA/ARSET e-learning certificates (in the enviro field)
- Numerous online Esri trainings
- Portuguese (Native), English (Fluent), French (B2)
- Canadian PR with pending Canadian Citizenship
- Valid class 5 driver licence

Daniel Yabar Meoño

I consider myself a hard-working, honest and ethical person. I like to work as a team, proactive and curious

Education

2024 – Remote Sensing Graduate Certificate
  COGS – NSCC, Lawrencetown, NS
2013 – Master Science in Watershed Management
  Centro Agronomico Tropical de Investigacion y Enseñanza, Turrialba, Cartago, Costa Rica
2007 – Bachelor in Environmental Engineering
  National University Agraria La Molina, , Lima, Peru

Skills

- GIS: ArcGIS Pro, QGIS, ModelBuilder
- Remote Sensing: CATALYST (Orthorectification, Classification, Enhancement), Bentley, LiDAR, Google Earth Engine, Google Studio
- Microsoft Office: Word, Excel, PowerPoint
- Research: Field Data collection and analysis
- Programming: Python, SQL
- Team player

Work Experience

2022 – Environmental consultant – *Munoz & Ocampo*
  o Hydrological study for rural communities for the natural infrastructure project
2022 – Environmental field worker – *SNC-Lavalin Peru S.A.C*
  o Field worke doing inventory of water sources and hydraulic infrastructure, taking physical-chemical parameters in situ for a Mining Company
2021 – GIS Consultant – *GIC Consulting Group ITEC – IGP*
  o Elaboration of a cartographic series for the National Service of Natural Protected Areas – SERNANP, such as land use change maps, base maps, anthropogenic index, fragmentation, multicriteria

Awards, Achievements & Other Notes

- WHMIS/OH&S certificate
- First Aid knowledge
- Vulnerability and Natural Risk certificate
- Development practices certificate
- Scholarship for a Master degree program
- Spanish (Native)
- Valid class 5 driver licence
- Captain of National University Agraria La Molina Men's soccer team (2004-2007)
- Basic Drone Licence

Program Overview

GIS Technician (Certificate)

The *Geographic Information Systems Technician* program is a derivative of some long-standing two-year programs at COGS. Students share some courses with other programs: Cartography, Planning, and Remote Sensing.

GIS (Geographic Information Systems) is one of the fastest growing technology sectors in the world. With GIS, technical users link and analyze spatial data sets to model the real world in support of the decision-making process. This program prepares you for this important career by giving you indispensable GIS skills and their application to environmental, municipal, and resource management projects. You're engaged in the full range of geomatics-related activities including collecting geospatial data using GPS and remote sensing, storing, manipulating, analyzing, interpreting, and communicating geographic information within a variety of disciplines.

Mark Hebert
GIS Technician Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-584-2069
E-mail: Mark.Hebert@nscc.ca

(Eight of the 12 *GIS Technician* students chose to be included in this publication)

Daniel Boates

Techy quick learner, can't help but optimize actions and workflows

Education

2024 – GIS Technician
   COGS – NSCC, Lawrencetown, NS

Skills

- Skilled in Excel / Google Sheets
- Works well independently
- Good file / computer organizational skills
- Experience with QGIS and various Esri programs
- Problem Solver -- Expert at Google-fu

Work Experience

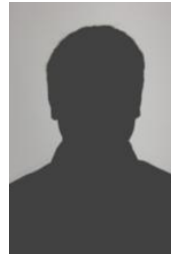2021-2022 – Service Writer
   Bruce Nissan and Mazda
   - Prepared customer vehicles and handled interaction between customers and technicians relaying any pertinent information
2022-2023 – Production Operator
   Michelin
   - Assembled tires while adhering to strict quality control methods with sub-millimeter accuracy

Awards, Achievements & Other Notes

- DELF B1 - Independent French Language Communication certificate
- Studying Japanese, preparing to take N5 JLPT
- Various Esri and Linked-In Learning courses completed
- WHMIS + OH&S Certified
- Class 5 Driver Licence and Passport, Willing to Travel

Ian Downie

Creative and experienced problem solver, motivated to build a career in the GIS industry

Education

2024 – GIS Technician
   COGS – NSCC, Lawrencetown, NS

Skills

- Esri: ArcGIS, ArcGIS Online, Field Maps
- Open Source: QGIS
- Database management: Postgres SQL
- Microsoft: Office365, Outlook, Excel, Word

Work Experience

2020-Present – Men's Program Head Coach
   Halifax Alta Gymnastics Club
   - Design and manage the men's gymnastics program and staff
2017-2020 – Men's Program Assistant Head Coach
   Halifax Alta Gymnastics Club
   - Design training plans, teach athletes and provide communication to clients and staff

Awards, Achievements & Other Notes

- Board member of the Men's Program Committee, Gymnastics Nova Scotia 2015-2023
- WHMIS & Nova Scotia OH&S certified
- CPR/AED & First Aid certified

Kate Goodwin

Organized, detail-oriented, and reliable. Looking forward to starting my career in GIS

Education

2024 – GIS Technician
COGS – NSCC, Lawrencetown, NS

Skills

- Organization and Time Management
- Works well in group settings
- ArcGIS Pro, ArcGIS Online (Dashboards, StoryMaps)
- QGIS
- AutoCAD Civil 3D
- Python and SQL
- Microsoft 365

Work Experience

2019-2020 – Cashier
Sobeys
- o Itemizing and totaling customers' purchases while providing a positive experience

2020-2023 – Clubhouse and Beverage Cart Staff
River Hills Golf & Country CLub
- o Schedules tee-times, cleans, provides service to golfers both inside clubhouse and on the golf course

2022-2023 – Assistant
Saunders Financial
- o File management, phone and fax machine, assembling forms, communicating with clients in a professional manner

Awards, Achievements & Other Notes

- Class of 2020 Valedictorian at Shelburne Regional High School
- 2020: Queen Elizabeth II Medal
- 4H Member for 10 Years- Had various roles: president, vice president, secretary
- Attended Saint Mary's University for two years, changed path to pursue interest in GIS at COGS

Rory Innes

I'm motivated to apply my expanding GIS knowledge to tasks in a professional setting

Education

2024 – GIS Technician
COGS – NSCC, Lawrencetown, NS

Skills

- Proficient use of ArcGIS Pro, and QGIS
- ArcGIS Online: StoryMaps, Dashboard, Quick Capture, Survey 123
- Capturing data using an RTK unit
- Office suite: Word, Excel, PowerPoint
- Drafting: AutoCAD, Civil3D
- Experience with geoprocessing using Python and Model-Builder.
- Great time management
- Work well independently and in a team environment
- Very flexible and adaptable
- Great file management

Work Experience

2022-2023 – Delivery Driver
Bureau Veritas
- o Provide pick-up or delivery services for parcels, samples, etc. to/from customer locations

2019-2022 – Security
GardaWorld
- o Ensuring safety with vigilant patrols, rapid response, and monitoring of surveillance cameras

2018-2019 – Field Supervisor
Securitas
- o Maintaining multiple sites, patrols, guards & guards schedules for the province of Nova Scotia

Awards, Achievements & Other Notes

- Esri E-Learning: 20+ Hours
- WHMIS and OH&S Certifications
- Valid Canadian Passport
- Valid Nova Scotia Class 5 Driver Licence
- Clean Driving Abstract
- Defensive Driving Courses
- Ability to perform physically demanding and repetitive tasks

Alexander Kippenhuck

Inquisitive in my approach, zealous in my nature and versatile to handling any problem

Education

2024 – GIS Technician
COGS – NSCC, Lawrencetown, NS

Skills

- Ability to work in a team or on my own
- Resourceful
- GIS: ArcGIS Pro, ArcGIS Online & QGIS
- Programming/Scripting languages: PostgreSQL & Python
- Experience with Microsoft Excel, Word, Teams and OneNote
- Introductory knowledge of AutoCAD
- Beginner in Spanish
- Mobile GIS: Field Maps & ArcGIS StoryMaps

Awards, Achievements & Other Notes

- 15+ Esri E Learning Courses
- 15+ LinkedIn learning
- WHMIS and OH&S Certified

Kelsey Martin

GIS enthusiast with diverse skill set, eager to contribute and learn with dynamic projects

Education

2024 – GIS Technician
COGS – NSCC, Lawrencetown, NS
2015 – Natural Resources Environmental Technology
NSCC - Lunenburg, Bridgewater, NS

Skills

- Comfortable with QGIS Software
- Comfortable with various ArcGIS Online Applications
- Experienced Data Collector and Analyst
- Experience with ArcGIS Pro Desktop
- Comfortable with Microsoft Products (Excel, Word, PowerPoint)
- Comfortable with GPS and Compass work
- Experience with Canadian Aquatic Bio Monitoring Network
- Comfortable with Technical Report Writing
- Experience with Environmental Sampling
- Experience with Coastal & Marine Management

Work Experience

2020-2021 – Manufacturer
L&M Highland, Dartmouth
- Working with machinery & hand tools to manufacture leather goods and specialty products

2018-2020 – Repairs/Customer Service
Fallers Jewelers, Ireland
- Servicing customer jewellery - quick repairs, taking inventory, working closely with other companies

2015-2016 / 2017-2018 – Jeweler
Northwood Rings, Lunenburg
- Hand crafting bespoke wooden and gold weddings rings. As well as the office work when needed

Awards, Achievements & Other Notes

- 1st international intern for SORAC, Monterey Bay Aquarium
- Spent a work term volunteering w/ Sea Turtles in Costa Rica
- Piping Plover Special Management Zone Restoration Volunteer
- 160-hour TESOL/TESL/TEFL Teacher Training Certification
- Completion of various online Esri courses
- MED A1 Training Certificate (2013)
- Wildland Fire Training (2013)

Isaac Sampson

Team player, friendly, and adaptable. Eager to utilize GIS in the workforce

Education

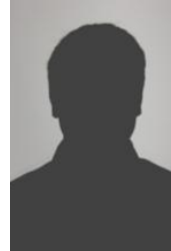2024 – GIS Technician
COGS – NSCC, Lawrencetown, NS

Skills

- Programming: Python, SQL
- GIS: ArcGIS Pro, ArcGIS Online, QGIS, Model Builder
- Microsoft: Excel, Word, PowerPoint
- Data Collection: Survey123, Field Maps
- Drafting: AutoCAD, Civil 3D
- Team oriented and goal driven
- Effective time management skills

Work Experience

2017, 2019-2023 – General Labourer
C.R. Lobsters
  o Working in a team environment to purchase and transport various seafood products to global buyers

2018-2019 – Bander
Five Reasons Fisheries
  o Measuring, banding, safe lobster handling, adhering to vessel safety, protocols, and procedures.

Awards, Achievements & Other Notes

- WHMIS and OH&S 2023
- Esri E-Learning certificates
- Valid Canadian passport
- International volunteer experience
- Deep interest in marine sciences and working in marine environments

Jenna Scott

Detail oriented, hard working, problem solver looking to expand my knowledge and experiences

Education

2024 – GIS Technician
COGS – NSCC, Lawrencetown, NS

Skills

- ArcGIS Online
- ArcGIS Pro
- AutoCAD Civil 3D
- Excel
- QGIS

Awards, Achievements & Other Notes

- WHMIS and OH&S (2023)
- Esri E-Learning certificates

Program Overview

Geospatial Data Analytics (Graduate Certificate)

The *Geospatial Data Analytics (GDA)* program is an evolution of the long-standing *GIS for Business* program aimed at solving business-related problems. GDA provides students with analytical and technological tools for proposing, planning, and assessing business/environmental solutions that have a spatial component. The GDA program is unique in Canada and incorporates, along with GIS and numerous analytical tools, other technological tools such as data mining, computer programming (Python and R), business intelligence tools, Database Management Systems, image analytics, Machine Learning and Deep Learning, etc.

A graduate completing GDA is able to perform the following tasks:

- Map customers using various geocoding techniques
- Define and analyze trade areas
- Perform site selection and sales forecasting using the Huff model
- Assess locations of stores relative to customers & competition; determine sales territories
- Determine market potential & its location using statistical analysis, data mining, and GIS
- Identify customer/market types & location with statistical methods, data mining, and GIS
- Use data mining for finding hidden structures & patterns in business & demographic data
- Apply drive time and drive distance in locational analytics
- Solve various location-allocation problems
- Solve real problems defined by project sponsors

Graduates will find interesting and meaningful positions such as:

- Data analytics specialist
- Geospatial data interpretation analyst
- GIS analyst
- Applications specialist
- Spatial data manager

Steven Edwards
Geospatial Data Analytics Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-584-2078
E-mail: Steven.Edwards@nscc.ca

(12 of the 15 *Geospatial Data Analytics* students chose to be included in this publication)

Nicolas Beauchamp

A diligent and career-focused Environmental Data Analyst enthusiastic for the next challenge

Education

2024 – Geospatial Data Analytics
COGS – NSCC, Lawrencetown, NS
2022 – B.Sc. (Double Major) Environmental Science & Environment, Sustainability, and Society
Dalhousie University, Halifax, NS

Skills

- Designed and managed spatial relational databases
- Optimized code by identifying and correcting errors
- Conducted exploratory data analysis using descriptive statistics
- Generated accurate, informative, and scalable data visualizations
- Utilized Machine Learning to solve real-world problems
- Thinks conceptually and grasps highly technical info
- Developed effective solutions for environmental issues
- Demonstrated good judgement and decision-making skills
- Ability to collaborate effectively and respectfully
- Adaptable to fluctuating environments and responsibilities

Work Experience

2023 – Casual Salesclerk - *Nova Scotia Liquor Corporation*
- o Completes all responsibilities consistent with the purpose, vision, and values of the NSLC.
2023 – Teaching Assistant - *Dalhousie University*
- o Assisted teaching field methodology in the field and classroom settings
2021-2023 – GIS Intern - *Dalhousie University*
- o Supported faculty research efforts through data acquisition and data management tasks

Awards, Achievements & Other Notes

- NSCC's WHMIS Certification Course
- Dalhousie's Undergraduate Certificate in GIS
- Tri-Council Policy Certificate for Research Ethics
- Otter Certificate Best in Community Building
- RBC Sustainability Leadership Certificate
- College Platon Level 2 French Language Course
- Alliance Française Basic A-1 Language Course
- SkillPath First-Time Manager/Supervisor Seminar
- Emergency First-Aid CPR Level A
- Red Seal Certification of Qualification (Chef)

Uleeva Tato' Alre' Lago Crisanto

Outdoorsy, passionate, and eager to tackle environmental and socio-economic challenges using an intersectional lens

Education

2024 – Geospatial Data Analytics
COGS – NSCC, Lawrencetown, NS
2021 – B.Comm. Finance
Saint Mary's University, Halifax, NS

Skills

- Bilingual (English & Filipino)
- Programming (Python, R, HTML, CSS, SQL)
- Esri (ArcGIS Pro, Insights, Notebooks, StoryMaps, etc.)
- Database management: PostgreSQL
- Microsoft Suite (Word, Excel, PowerPoint, etc.)
- Geostatistical and image analysis
- Data mining and modeling
- Machine learning
- Intersectional approach

Work Experience

2023-present – ED & Registrar
Nova Scotia Real Estate Appraisers Association
- o Administer, maintain, and coordinate association's member registry. Organize membership education. Facilitate board and committee meetings.
2020-2023 – Accounting Coordinator
New Scotland Company
- o Coordinate product distribution. Conduct sales analytics and investigation for optimization. Manage financial activities.
YEAR-YEAR – Job position/title
Employer
- o Job description

Awards, Achievements & Other Notes

- Honours Standing
- Ongoing Esri Training/eLearning
- WHMIS and OH&S, 2023
- Valid NS Class 5 Driver Licence
- Work from home experience
- Avid outdoor adventurer
- First generation Canadian
- I would like to self-identify as a member of the 2SLGBTQIA+ and BIPOC communities

Tiana Gallo

Excited to apply my knowledge of Geospatial Data Analytics and GIS in a professional setting

Education

2024 – Geospatial Data Analytics
COGS – NSCC, Lawrencetown, NS
2017 – B.Sc. (Maj) Earth Sci & (Min) Physics
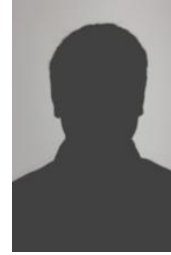*Memorial University of NL, St. John's, NL*

Skills

- ArcGIS Pro
- ArcGIS Online
- QGIS
- Python Programming
- R Studio Programming
- SQL Database Management
- Microsoft Office: Word, Excel, PowerPoint
- Strong customer service and communication skills
- Enjoys working collaboratively and on independent projects

Work Experience

2018-2023 – Reassessment Specialist
True North Disability Services
- Conducted tax reassessments and communicated with the CRA for clients to ensure accurate completion.

2016-2017 – Server/ Bartender
Yellowbelly Brewing and Public House
- Focused quality, teamwork, customer satisfaction, health and safety protocols in a fast-paced environment.

Awards, Achievements & Other Notes

- WHMIS and OH&S Certified
- Working from home experience
- Valid Nova Scotia Driver Licence – Class 5
- Ongoing Esri e-learning training
- Currently maintaining honours standing at COGS

Karlos Lao

A seasoned data analyst seeking to venture into unexplored realms of spatial data science

Education

2024 – Geospatial Data Analytics
COGS – NSCC, Lawrencetown, NS
2022 – B.A. (Hons) Geography & Commercial Aviation Mmgt
Cert. Geographic Information Science
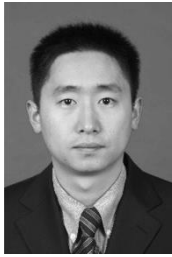*Western University, London, ON*

Skills

- Programming (Python, R, JavaScript, SQL, HTML, CSS)
- Proficient in using ArcGIS suite of products
- Proficient in using Earth Engine Python API
- SAR, LiDAR and hyperspectral image classification
- Experienced in acquiring remote sensing data
- Skilled in optimizing models and automating workflows
- Integrating QGIS, PostgreSQL and PostGIS for analysis
- Geospatial feature engineering and data transformation
- Capable of handling concurrent projects simultaneously
- Domain knowledge in commercial aviation and meteorology

Work Experience

2023-present – Junior Remote Sensing Analyst
Environment Canada
- Utilized a diverse range of remote sensing data to derive insights and support carbon modelling initiatives.

2021-2022 – Research Assistant
Surface Climate Lab (Western University)
- Assisted in gathering, compiling, and analyzing field data for various urban climate projects.

Awards, Achievements & Other Notes

- Government of Canada Reliability Status
- Environment Canada Atmospheric and Meteorological Award Recipient
- NSERC Undergraduate Student Research Award 2022
- Transport Canada Private Pilot Licence
- Ontario Class G Licence
- Multilingual, able to relocate outside of Canada
- Over 2 years of GIS work experience
- First generation Canadian
- Enjoy exploring new technology in modern GIS

Donghui Li

Passionate about learning new things

Education

2024 – Geospatial Data Analytics
  COGS – NSCC, Lawrencetown, NS
1997 – Bachelor of Engineering
  Huazhong University of Science and Technology, Wuhan, China

Skills

- GIS: ArcGIS Pro, ArcGIS Online, ArcMap, QGIS
- Programming: Python, HTML, CSS, SQL and R
- Database management with PostgreSQL and PostGIS

Work Experience

2016-2020 – Senior Legal Manager – Patent
  Didi Infinity Technology and Development Co. Ltd.
    o Patent portfolio management and patent licensing.
2007-2016 – Senior Patent Counsel
  Technicolor/Thomson Licensing
    o Patent portfolio management and patent licensing.
2002-2007 – Patent Attorney
  China Science Patent & Trademark Agent Ltd.
    o Patent filing and prosecution

Megan MacDonald

Versatile, driven Earth Science and Physics grad. Geospatial analyst, leader, and effective problem solver

Education

2024 – Geospatial Data Analytics
  COGS – NSCC, Lawrencetown, NS
2023 – B.Sc. (Hons) Earth Science & Physics
  Dalhousie University, Halifax, NS

Skills

- GIS: QGIS, ArcGIS Pro, ArcGIS Online, GeoDa
- Remote Sensing: LiDAR, Image Processing, Orthorectification, DEM
- OS: Windows, MacOS, iOS, Android, Linux, CromeOS
- Database Management: PostgreSQL, PostGIS, PG Admin
- Coding: Python, R, MATLAB, CSS, HTML, SQL, LaTeX
- Communication: Scientific Writing, Presentations, Public Speaking, Instructing
- Microsoft Office: Word, PowerPoint, Excel, Teams
- Data Mining: Orange
- Photography and Adobe Lightroom

Work Experience

2021-present – Research Assistant – *Dalhousie University*
    o Presently Biosignal Medical Physics Lab , previously Dalhousie Quake Seismology Group, Cosmic Ray Isotope Sciences Lab
2018-present – Various Roles – *Halifax Citadel National Historic Site*
    o 2023 - Present Events Supervisor, 2018-2023 Banquet Server, 2018 – 2021 Historical Interpreter
2021-2023 – TA, Marker/Demonstrator – *Dalhousie University*
    o Instructed and marked for 8 different 1000-3000 level classes in ERTH, GEOG, and SCIE

Awards, Achievements & Other Notes

- Dalhousie Best Earth Science Thesis Award 2023
- Atlantic Universities Geoscience Conference CSEG Award
- Various scholarships totaling $30 000
- Leadership Awards: Trailblazer Gold, Clan Sutherland
- Parks Canada Volunteer Researcher for Species at Risk
- Dean's List (2020, 2021,2023)
- WHMIS and OH&S Training
- Valid Class 5 Nova Scotia Driver Licence
- Former President of Dawson Geology Undergrad Society
- https://www.linkedin.com/in/megan-macdonald-a47b37220/

Alex Moss

Quick learner who loves problem-solving, excited to jump into the world of Geospatial Data Analytics

Education

2024 – Geospatial Data Analytics – *COGS, Lawrencetown, NS*
2020 – B.Eng. Mineral Resource – *Dalhousie, Halifax, NS*

Skills

- Proficient in ArcGIS Pro, ArcGIS Online, QGIS
- Becoming increasingly knowledgeable with Python, SQL, R
- Proficient in database design and mgmt: PostgreSQL
- Data Mining – R, Python, Insights, Orange
- Location analytics – ArcGIS Pro's Business Analyst tools
- Carrying out spatial analysis and geostatistics using various GIS industry tools.
- Solving geospatial problems using geoprocessing tools
- Microsoft Suite (Excel, Publisher, Word, PowerPoint, etc.)
- Technical report writing, public speaking, presentations
- Teamwork, communication, leadership, organized

Work Experience

2022-2023 – Reliability Engineer – *St Barbara Atlantic Gold Operations*
  o Optimized gold mining operations, led weekly KPI & RCFA meetings, and provided crucial tech support
2022 – Project Coordinator – *Dexter Construction*
  o Oversaw planning, execution, and delivery of projects. Managed resources, schedules, materials, and ensured quality control
2020-2021 – Civil Engineer-in-Training – *Dillon Consulting*
  o Road construction inspector ensuring projects met quality control, schedule, safety requirements and budget objectives

Awards, Achievements & Other Notes

- Experience working as a Tennis Instructor
- Experience working as a university level Math & Sci Tutor
- 13 years playing organized hockey & soccer, focusing on leadership and teamwork
- Fluent in both English and French
- NSCC Honours List, Fall 2022
- Mining Engineering Society, 5th year Rep @ Dalhousie
- Dalhousie University Dean's List
- Cape Breton University Dean's List, with distinction
- President's Scholarship, Cape Breton University
- Cape Breton Professional Engineering Memorial Scholarship

Laura Raposo

Passionate and driven marine biologist, eager to learn and work in conservation and climate research

Education

2024 – Geospatial Data Analytics
  COGS – NSCC, *Lawrencetown, NS*
2021 – B.Sc. Marine Biology
  Cert. Geographic Information Systems
  Dalhousie University, Halifax, NS

Skills

- Fluent in English and Portuguese
- Proficient in Geographic Information Systems (QGIS and Esri Products)
- Data analysis and management with: R, Python, SQL
- HTML/CSS
- Leadership and Management
- Teaching and Science Communication
- Field data collection methods and sensor use

Work Experience

2019-present – Multiple positions
  Ocean Tracking Network
  o 2019-present Glider Pilot: pilot Wave Gliders along Atlantic Ocean, avoid dangerous areas/vessels, maintain routes, offload data from acoustic receivers.
  o 2021-2023 Glider Technician: manage Wave Glider research missions, support data collection & mgmt.
2021 – Research Assistant
  Oceana
  o Conducted GIS focused research support of fisheries, North Atlantic Right Whale and habitat campaigns.
2020-2021 – Teaching Assistant
  Dalhousie University
  o Conduct grading, student and course management for Dr. Boris Worm's Conservation Biology class

Awards, Achievements & Other Notes

- 2020 Teaching Assistant Award
- PADI Dive Master
- STCW 6.1
- MED A3
- Small Vessel Operator Proficiency
  Certificate of ethical handling of fish

Mira Rayson

Accomplished graduate, driven and disciplined. Eager to build experience for an impactful career in geomatics

Education

2024 – Geospatial Data Analytics
COGS – NSCC, Lawrencetown, NS
2022 – Bachelor of Arts in Sustainability
Dalhousie University, Halifax, NS

Skills

- GIS: ArcGIS Suite, QGIS, PostGIS
- Programming: Python, R, SQL, JavaScript, HTML, CSS
- APIs: Google Earth Engine, OpenStreetMap, USGS Explorer
- Database Management & PostgreSQL
- Remote Sensing: Image Enhancement, Classification, and Orthorectification
- Data preparation and exploratory data analysis expertise
- ML: Regression/Classification models, SVM, neural networks
- Risk and impact assessment: environmental, financial, health
- Strategic & adaptable business analytics

Work Experience

2019-present – Server & Bartender
Economy Shoe Shop Bar/Restaurant
- Facilitating an enjoyable & responsible restaurant experience for guests, managing staff, mitigating risk and emergency
2022 – Business Sustainability Analyst Co-op
Chicory Blue General Store
- Performed analysis for solar and EV infrastructure, active transportation routing, political campaigning, historical database management

Awards, Achievements & Other Notes

- Honours Recognition, NSCC, 2023-24
- Dean's List, Dalhousie University, 2021 & 2022
- Academic Excellence Scholarship, Dalhousie University, 2020-2022
- Standard First Aid, WHMIS, OH&S
- Determined, hard-working, and creative leader

Adam Savory

Decorated military intelligence career, specializing in Geo-Intelligence, machine learning, imagery analysis and front-end application development

Education

2024 – Geospatial Data Analytics
COGS – NSCC, Lawrencetown, NS

Skills

- location analysis
- imagery analysis
- database management
- python, SQL, HTML
- extensive presentation experience
- project management
- team leadership
- machine learning
- report creation, editing and publishing
- front end application development and deployment
- client relations

Work Experience

2020-2022 – Data Analyst - *Communications Security Establishment*
- Using GIS software to perform intelligence analysis and producing reports in multiple formats
2015-2020 – Signals intelligence specialist - *Canadian Forces Electronic Warfare Centre*
- Lead the integration of new technology to improve reporting standards
2011-2015 – Data Analyst - *Canadian Forces Station Leitrim*
- Intelligence collection, analysis, and production creation

Awards, Achievements & Other Notes

- Received the Meritorious Service Medal (MSM) from the Governor General for my work in developing new capabilities. With the purpose of providing near real time threat evaluations, while enabling more user-friendly adoption

Owen Smith

Data Analyst / Programmer, Mechanical Engineer ready to apply GIS and BI to solve meaningful, complex problems

Education

2024 – Geospatial Data Analytics
   COGS – NSCC, Lawrencetown, NS
2022 – B.Eng. Mechanical
   Dalhousie University– Halifax, NS

Skills

- GIS: ArcGIS Pro, ArcGIS Online, QGIS
- Analysis: ArcGIS Insights, Orange, RStudio, Power BI
- Database: MS Access, SSMS, PostgreSQL, PostGIS
- Programming: Python, VBA, HTML, XML, R, SQL
- MS Office: Word, Excel, PowerPoint
- Design: SolidWorks, AutoCAD Inventor

Work Experience

2022-2023 – MS Access and SQL Developer
   Intelligent Design Support Systems Inc.
   o Converted and tuned existing Custom MS Access application database to SQL Server.
   o Created custom plug-ins for MS Office products to facilitate communications across a large network of professionals
2019 – Engineering Co-op Student
   Irving Shipbuilding Inc.
   o Completed a variety of design and engineering tasks, including designing tools and storage devices to support production at the shipyard and at Irving Marine Fabricators

Awards, Achievements & Other Notes

- Dalhousie project became an art installation: https://nac.org/pin-drop-carolyn-wren/
- Hobbies include collaborative storytelling games, writing, drawing
- Passionate about the health of our world
- WHMIS and OH&S Certified
- Nova Scotia Class 5 Driver Licence
- Willing to relocate

Amber Vanderdoe

A passionate academic excited to explore geospatial data in the field of science

Education

2024 – Geospatial Data Analytics – *COGS, Lawrencetown, NS*
2021 – B.Sc. (Hons) Forensic Science and Biology
   Trent University, Peterborough, ON

Skills

- Map Creation: ArcGIS Pro, ArcGIS Online, Field-Maps, QGIS, StoryMaps
- Programming: HTML, RStudio, JavaScript, CSS, Python
- Data Management: PostgreSQL, pgAdmin
- Experienced in data analysis and writing reports
- Experience in laboratory accreditation processes and writing/editing SOP standards
- Trained in lab safety, WHMIS, and lab protocols
- Strong knowledge of marine and terrestrial ecology and conservation, fisheries assessment and management, fish ecology, and herpetology
- Experience training staff and tutoring school-age children

Work Experience

2023 – Present – Laboratory Technician - *The Water Shed / Precision Water Testing*
   o Independently responsible for laboratory accreditation and analyses.
   o Accountable for laboratory management and maintaining laboratory accreditation status
2022 - 2023 – Lab Technician B - *AGAT Laboratories*
   o Working in a high-volume, inorganics testing laboratory collecting data, performing, and interpreting results for various water & soil analyses
2018 - 2022 – Assistant Manager / Sales Associate - *Rogers / Fido Communications*
   o Balanced excellent customer service while reliably completing varied store upkeep tasks, including inventory and stock management

Awards, Achievements & Other Notes

- Independently achieved laboratory accreditation at Precision Water Testing laboratory in Dartmouth NS
- Numerous Esri e-learning certifications.
- Recipient – Fall 2023 Equity in Geomatics Bursary at NSCC
- Five-year WHMIS certification completed in 2023
- Valid driver licence and vehicle
- Willing to relocate

Program Overview

IT Programming (Diploma)

Almost every aspect of business, education, and healthcare relies increasingly on information technology (IT). As the world embraces new technologies, IT and related technical knowledge and skills have become even more important.

Throughout this hands-on program, current industry standards are reflected in our lab environments, with unique-to-COGS exposure to geomatics standards and applications, helping to prepare you to work on industry projects as part of your work term. You may also have an opportunity to work on projects that contribute to community and non-profit organizations.

There are several concentrations within NSCC. Not all are offered at each NSCC campus. At COGS, the IT Programming diploma is offered.

The second-year IT Programming diploma requires a detail-oriented, logical mindset mixed with a sense of creativity in both its design and programming aspects. It appeals to individuals who like puzzles, problem-solving, and innovation, and would like to improve software systems to deliver a better user experience, enhance program and network security and performance through improved design and development process. There is growing recognition from all sectors of industry of the vital contribution that computer software has on an operation's success. Well-designed applications and well-written code improve operational efficiency, commercial performance, & end-user experience.

Sharla Rolfe-Hunter
Information Technology Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-825-5228
E-mail: Sharla.Rolfe-Hunter@nscc.ca

(One of the 15 *Information Technology* students chose to be included in this publication)

Justin Bishop

I left 100k oilfield to start
software development at 34

Education

2024 – IT Programming
COGS – NSCC, Lawrencetown, NS
2010 – B.B.A.
Acadia University, Wolfville, NS

Skills

- Continuous learner with a commitment to staying updated on the latest industry trends and technologies
- Strong communication, problem solving and collaboration skills
- C++, Java, SQL, HTML/CSS, JavaScript, Git, PHP and more
- Solid understanding of software development methodologies, with a focus on agile practices
- Proficient in both front-end and back-end development, showcasing a comprehensive understanding of the entire software development stack

Work Experience

2016-2018, 2020-2022– Slickline Operator
Bonnett's Energy
- Downhole service for oil and gas wells across western Canada

2018-2020– Instrumentation Apprentice
Surepoint Group
- Built instrumentation on new oil and gas pads across western Canada

Awards, Achievements & Other Notes

- NSCC – COGS Student Association VP Communications 2022-2023
- NSCC – COGS Student Association President 2023-2024

Program Overview

Marine Geomatics (Graduate Certificate)

The objective of *Marine Geomatics Graduate Certificate* Program is to develop a professional who has a thorough grounding in Geomatics and can use these skills most effectively in the management, exploration, and monitoring of the marine and coastal environments.

The program allows graduates to apply their skills in the marine environment where there is a high demand for persons with Geomatics-related expertise. This is an arena which has one of the largest growth potentials of any economic sector in the Canadian and global economies.

Graduates can apply the integrated geodetic skills of GPS positioning and hydrographic surveying to marine-based activities such as bathymetric data acquisition and analysis, energy exploration activities, and projects dealing with the coastal zone and offshore areas. Graduates use their understanding of the geodetic tools and concepts to acquire efficiently and effectively, process, analyze, and disseminate marine-related data. Skills and expertise acquired through this program are invaluable to coastal mapping and nautical charting agencies, hydrographic surveying organizations, offshore construction and resource exploration/management companies, habitat-mapping organizations, and firms involved in coastal zone management, environmental, geological, and geophysical sciences.

Links between marine sciences and hydrographic surveying are examined in this one-year intensive program. Topics explored include geographic information systems, physical oceanography, remote sensing, cartography, and GPS applications, as they apply to offshore positioning projects and bathymetric data collection and analysis.

The *Marine Geomatics* Program provides students with the introductory skills required to get a satisfying, well-paying job in the geomatics industry. The program is committed to providing the technical and interpersonal skills necessary to succeed in an offshore-related environment. The Marine Geomatics Program is a well-rounded learning environment that includes individual, and group projects such as the Marine Geomatics Field Camp

Dan Arsenault
Marine Geomatics Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
E-mail: Dan.Arsenault@nscc.ca

(Five of the six *Marine Geomatics* students chose to be included in this publication)

Aditya Dabhi

Friendly, easy going and always ready to learn about underwater world

Education

2024 – Marine Geomatics
COGS – NSCC, Lawrencetown, NS
2023 – Post-Graduation Certificate (Aquaculture)
Fleming College, Lindsey, ON
2021 – Bachelor of Science (Biotechnology)
VNSGU, Surat, India

Skills

- Geoprocessing Software: AutoCAD, Civil 3D, Global Mapper, ArcGIS
- Geodetic Software: Geographic Calculator, TRX, GPS-H
- Surveying/GNSS: Static, RTK, RT-PPP, DGPS, Levelling, Leica Total Station
- Drafting Software: AutoCAD, Civil3D
- Biology background- good with working in lab & people skills

Work Experience

2021 - 2023 – Pathology Lab Technician
Apple Hospital
  o Performing various test and microscopy

Awards, Achievements & Other Notes

- 2019-2021 member of Youth Red Cross
- Nature Club member
- Animal rescue
- First Aid and CPR, Disaster management, WHMIS, NS OH&S

Nasir Kolapo Idowu

Motivated to start a career in the Marine industry by applying my marine geomatics

Education

2024 – Marine Geomatics
COGS – NSCC, Lawrencetown, NS
2023 – Bachelor of Technology
Bells University of Technology, Ogun State, Nigeria
2019 – Higher National Diploma
Kwara State Polytechnic, Kwara, Nigeria

Skills

- Effective use of Surveying Instruments: Total Station, RTK, DGPS, Digital Level
- Effective use of Geoprocessing Software: AutoCAD, Civil 3D, GNSS, Global Mapper, ArcGIS, SonarWiz GrafNet
- Geodetic Software: Geographic Calculator, TRX, GPS-H, INDIR, & NTv2
- LiDAR: Survey planning, acquisition & processing (airborne/terrestrial/bathymetric)

Work Experience

2019 - 2023 – Survey Technologist
Geo Real Build Limited

Awards, Achievements & Other Notes

- Member of Young Surveyors Network
- Associate Nigerian Institute of Surveyor
- WHMIS – Workplace Hazardous Materials Information System
- SAFE1001: Introduction to the Nova Scotia Occupational Health and Safety Act

Basil Manam Kunnan

Civil Engineering graduate adept in land surveying, AutoCAD drafting, expanding into Marine Geomatics, seeking marine opportunities

Education

2024 – Marine Geomatics
COGS – NSCC, Lawrencetown, NS
2018 – Bachelor of Technology in Civil Engineering
University of Kerala, Trivandrum, Kerala, India

Skills

- Bathymetric Data Acquisition
- Data Processing Software: Caris HIPS & SIPS
- GIS Software: Esri ArcGIS Pro and ArcGIS Online
- Drafting Software: AutoCAD drafting
- Navigation Software: NavView, Qinsy
- Programming Languages: Python and C++
- Work Site Management Skills

Work Experience

2021-2023 – Civil Draftsman
Provincial Government of Kerala
  o Managed workflow files related to Harbour Engineering projects in the state of Kerala, India
2018-2021 – Site Supervisor
P M Mansoor, PWD Contractor
  o Work site management, quality control and monitoring of various heavy construction like breakwaters

Awards, Achievements & Other Notes

- Member of Indian Society of Non-Destructive Testing from 2014-2018
- Member of Indian Concrete Institute during the period October 2016 – September 2017 and February 2018 – January 2019
- Played the role of Campus Ambassador for the 12th Edition of Pragyan, the International Techno Management Organization of National Institute of Technology, Trichy, Tamil Nadu, India

Albert Okon

Friendly social welcoming and easy-going person who looks forward to a brighter years in the professional world

Education

2024 – Marine Geomatics
COGS – NSCC, Lawrencetown, NS
2019 – Bachelor of Engineering
Akwa Ibom State University, Akwa-Ibom, Nigeria

Skills

- Microsoft Word, Excel, and PowerPoint
- ArcGIS Pro
- LiDAR
- AutoCAD
- NavView
- Global Mapper
- GPS-H
- Engineering

Work Experience

2020-2023 – Human Resource Manager
Inameti Enterprise
  o Successfully oversaw other staff members and enhanced workplace harmony and employee satisfaction by leading conflict resolution efforts
2019-2020 – Corp Member
National Youth Service Corps of Nigeria
  o Assisted with office task and duties and also participated in community development services
2017 – Internship
SeaCoach
  o Assisted Senior Engineers, contributed to maintenance and repairs of marine equipment, and ensured work safety measures were followed; assisted in anyway necessary as required due to other duties

Awards, Achievements & Other Notes

- Personal Survival Techniques
- Fire prevention and fire fighting
- Elementary First Aid / CPRI Personal Safety and Social Responsibilities
- WHMIS, OH&S
- Driver licence
- Enthusiastic and a Chess Lover

Amy Watson

Adaptable and eager to learn, with a passion for the ocean and acoustics

Education

2024 – Marine Geomatics
COGS – NSCC, Lawrencetown, NS

Skills

- Software: CARIS, Qimera, SonarWiz, Global Mapper, MapLink Studio, Leica Infinity, Excel VBA, Python
- Esri Products: ArcGIS Online, ArcGIS Pro
- Navigational Software: 4DNav, EVIA NaviPac, QINsy
- Drafting Software: AutoCAD, Civil3D
- Software: Geographic Calculator, GPS-H, NTv2, INDIR, TRX
- Surveying/GNSS: Static, RTK, RT-PPP, DGPS, Levelling, Leica TotSta
- Sensors: 36B BT, 62E DICASS, 53D DIFAR Sonobuoys, MX-20 EOIR, ESM, RADAR, LiDAR
- Expendables: MK39 EMATT, ESUS, Marine Markers, LUU-2D/B Flares, MK46, SKAD Training
- Leadership: Flight/Sim. Inst, AIT, AES Op Lead, ASO Lead
- Canadian & international deployment experience

Work Experience

2022-2023 – Primary Instructor & Course Director
RCAF with 404 LRP&T Sqn
  o Teaching in classroom, simulation, and in-flight
2019-2022 – Acoustic Sensor Operator – Advanced Category
(ASO-A) – *RCAF with 405 LRP Sqn*
2016-2019 – Acoustic Sensor Analyst & Electronic Sensor
Support – *RCAF with 14 OSS*

Awards, Achievements & Other Notes

- Completed 10 years of active military service with the Royal Canadian Air Force (RCAF)
- Two Middle East tours as part of Joint Task Force Iraq
- Basic Passive Acoustic Analysis Course (BPAAC) and Advanced Acoustic Analysis Course (AAAC)
- Experience with bathymetry and ambient sound pressure level collection in the Atlantic and Pacific
- Passive acoustic monitoring for Marine Mammal Mitigation (MMM) locally and on deployment
- Comfortable using radios and experienced collaborating in an airborne/marine environment
- Experience in emergency procedures, preparedness, & response
- First Aid & CPR, Mental Health First Aid, WHMIS, NS OH&S

Program Overview

Survey Technician (Certificate)

The *Survey Technician program* at COGS has been training survey technicians for over seventy years. The graduates of this one-year program have a choice of going directly into the workforce or continuing their education and enrolling in the *Geomatics Engineering Technology* program at COGS.

This program exposes students to the basics of survey calculations and fieldwork procedures using both automatic levels and total stations. Students learn data collection procedures for both on-board and external data collectors. At this technician level, students conduct GIS-grade data-collection surveys using hand-held GPS receivers.

In the office environment, students are introduced to AutoCAD, CG-Survey, and the Microsoft Office suite of software. The Survey Technician graduate is capable of drafting both legal and construction drawings within an AutoCAD environment.

Typically, Survey Technicians find employment at entry-level positions in both the private and public sectors of the Geomatics Industry. This would include, but is not limited to, construction companies, private land survey firms, oil and natural gas exploration companies and civil engineering firms in Canada and the United States.

Kevin Lombard
Survey Technician Faculty
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
E-mail: Kevin.Lombard@nscc.ca

(Six of the 32 *Survey Technician* students chose to be included in this publication)

Aidan Bouchard

I am a hard worker who is eager to learn and I have one summer of survey experience

Education

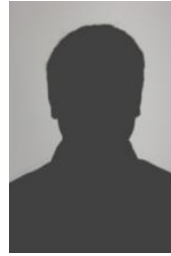2024 – Survey Technician
COGS – NSCC, Lawrencetown, NS

Skills

- Operating & setting up Carlson BRX7 RTK equipment
- Conduct topographic surveys using GNSS equipment
- Draft and process data using AutoCAD
- Search and locate boundary evidence
- Measure inverts and storm utilities
- Performing quantity surveys on culverts
- Bilingual

Work Experience

2023-2023 – Survey Assistant
Strum Consulting
- o Participating and assisting in the conduction of both legal and topographical work

2022-2022 – Labourer/Apprentice Carpenter
Steven Doyle Construction
- o Assisting in measuring, cutting and laying down flooring, loaded and unloaded trailers with equipment

2021-2022 – Labourer
Route 337 Land Management
- o Laid and built retaining walls, tamped down concrete, poured concrete, raked and levelled soil

Awards, Achievements & Other Notes

- Nova Scotia Class 5 Driver Licence
- WHMIS- Workplace Hazardous Materials Information System
- OH&S- Occupational Health and Safety
- MED Domestic Vessel Safety

William Bryanton

Motivated, hardworking, and adaptable worker. Ready to start my surveying

Education

2024 – Survey Technician
COGS – NSCC, Lawrencetown, NS

Skills

- Surveying: Proficiency with Total Station, Leveling, Maps, Plans, Compass, GPS, RTK Collection
- Data Entry: Experience with AutoCAD, Carlson, Excel, Word, Creating fieldnotes
- Data Interpretation: Maps and Plans, Survey Problem Solving

Work Experience

2023-2023 – Machine Operator
Michelin Tire Waterville Plant
- o Assisted technicians in finding defects in various rubber qualities for tire building

2022-2022 – Recording Crew Line Boss
Eagle Canada
- o Managed line crew for layout and retrieval of data collection equipment

2021-2021 – Landscaped Labourer
Acacia Grove Horticulture Services
- o Worked on various hard/soft landscaping projects

Awards, Achievements & Other Notes

- First aid expires February 2024
- Class 5 Nova Scotia Driver Licence
- WHMIS received September 2023
- OH&S received September 2023
- H2S Alive expires December 2024

Laura Crosby

Organized and hardworking. Great at problem solving and getting the job done

Education

2024 – Survey Technician
COGS – NSCC, Lawrencetown, NS
2010 – B.Sc. (Maj) Chemistry (Min) Mathematics
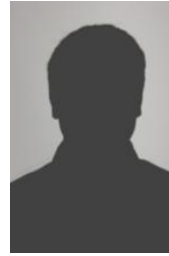*Mount Saint Vincent University – NSCC, Halifax, NS*

Skills

- Perform traverse survey and coordinate computations
- Proficient in Microsoft Excel, AutoCAD and Carlson
- Record survey measurements and data using organized and clear field notes and sketches
- Position tripods, vertical rods or targets to measure angles, distances and elevations
- Perform field surveys with equipment such as levels, total stations and GPS
- Compare survey computations with applicable standards to determine accuracy of data
- Exceptional customer service skills from 15+ years in management positions in restaurant industry

Work Experience

2010-2012, 2018-2020 – Night Manager
Alexandras Plzza
- o Responsible for all aspects of the business including employees, orders, inventories, labor and food costs, cash

2014-2017 – General Manager
Freshii
- o Responsible for all aspects of the business including employees, orders, inventories, labor and food costs, cash

2012-2014 – Assistant Manager
Dairy Queen
- o Kept track of inventories, food cost and speed of service. Day-to-day running of the store

Awards, Achievements & Other Notes

- Valid Driver Licence and own vehicle
- WHMIS (Sept 2023)
- Occupational Health and Safety (Sept 2023)

Brandon Drummond

Enthusiastic professional seeking a meaningful position in the surveying field

Education

2024 – Survey Technician
COGS – NSCC, Lawrencetown, NS
2021 – Intro to Surveying Certificate Survey Technician
NSCC, Self Directed

Skills

- AutoCAD & Carlson
- Equipment Maintenance and repair
- Fieldwork
- Field Genius
- GNSS
- Total Station
- Survey Research
- Strong oral and written communication skills
- Dependable
- Adaptable/Flexible
- Independent
- Fast learner
- Excellent attention to detail
- Fluent in Microsoft software, Excel and Word

Work Experience

2020-Present– Survey Technician
Natural Resources and Renewables
- o Search, locate and recover existing survey markers. Compile and verify preexisting data. Record data using electronic devices

Awards, Achievements & Other Notes

- Valid Driver Licence and own vehicle
- WHMIS (Sept 2023)
- Valid Class 5 Driver Licence
- WHMIS and OH&S Certified
- Top marks overall-O'Regan's Apprentice Academy
- Standard First Aid AED CPR "C"-St. John Ambulance
- Chainsaw Safety Awareness-FSSNS
- ATV Operator Certificate- Safety Minded ATV Services
- The safety and wellness of Type 1 Wildland Fire Fighters-CIFFC
- Hover Exit Certified-CIFFC

Traeic Huntley

An adventurous and dedicated individual eagerly looking forward to entering the surveying industry

Education

2024 – Survey Technician
   COGS – NSCC, Lawrencetown, NS

Skills

- Use of Total Stations, GNSS, levelling equipment
- Proficient with AutoCAD and Carlson Software
- Spreadsheets and macros using Excel
- Type approx. 72 words per minute
- Quick learner of computerized systems
- Works independently and in a team environment
- Skilled in workspace organization
- Proficient in the use of planograms, layouts
- Can work in various and inclement weather

Work Experience

2017-2020 – Presentation Replenishment Specialist
   Michaels Canada
   - Worked as part of a team unloading new merchandise to deliver a positive customer experience

2017 – Volunteer
   Halifax International Busker Festival
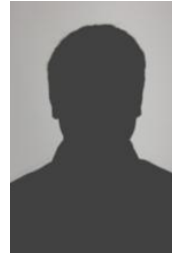   - Responsible for event experience and safety while tending to attendees and performers needs

2017 – Volunteer
   Tall Ships Regatta
   - Responsible for on site information dissemination and event experience

Awards, Achievements & Other Notes

- WHMIS & Nova Scotia OH&S certified
- Emergency First Aid CPR "A" & AED
- Valid driver licence

Jeron Lloyd

Adaptable, highly driven individual skilled in problem-solving, achieving results, and ready for new challenges. Bring it on

Education

2024 – Survey Technician
   COGS – NSCC, Lawrencetown, NS
2019 – Master of Technology Entrepreneurship & Innovation
   Saint Mary's University – Halifax, NS
2017 – B.Comm.
   Saint Mary's University – Halifax, NS

Skills

- Experience with AutoCAD, Carlson Software, and FieldGenius
- Experience with Leica & Nikon Total Station
- Experience with Map Reading, GPS Navigation and Compass
- Programming languages: HTML, CSS, Python, JavaScript and VBA
- Proficiency in Microsoft Office, Azure & Microsoft PowerApps

Work Experience

2020-2023– IT Analyst
   IMP Solutions
   - Provide remote IT support for a wide variety of clients across Canada and the USA

2016-2020– Tech Support
   ITSS - Saint Mary's University
   - Provided technical support and assistance for faculty, students & visitors by phone, email and/or in-person

Awards, Achievements & Other Notes

- WHMIS/OH&S Certified
- Emergency First Aid CPR "A" & AED
- Nova Scotia Class 5 Valid driver licence
- Microsoft Azure Fundamentals Certified
- Willing to relocate

Master of Science (Applied Geomatics)

Graduates of the *Geographic Information Systems*, *Geospatial Data Analytics*, *Remote Sensing*, *Marine Geomatics*, and *Cartography and Geovisualization* programs can pursue a one-year M.Sc. in Applied Geomatics at Acadia University. Building on their geomatics training acquired at COGS, students in this program work closely with external partners in industry, government, academia and the community at large to develop solutions to real-world geomatics problems.

A graduate completing the M.Sc. in Applied Geomatics is able to perform the following tasks:

- Advanced image analytics using state of the art Machine Learning and Deep Learning algorithms
- Complex spatial analysis using diverse data types
- Develop custom GIS solutions from scratch
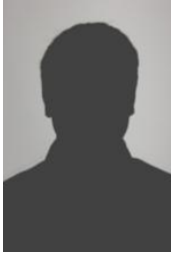- Extend functionality of industry standard GIS software

Graduates will find interesting and meaningful positions such as:

- GIS developer
- GIS analyst
- Remote Sensing analyst
- Ph.D. student in geomatics

Steven Edwards
M.Sc. (AG) Co-ordinator
NSCC - Centre of Geographic Sciences (COGS)
Lawrencetown, Nova Scotia, Canada, B0S 1M0
Phone: 902-584-2078
E-mail: Steven.Edwards@nscc.ca

COGS Faculty

Dan Arsenault

Program(s):
MGEO

Mark Hebert
PLIT, CCEDP

Program(s):
GIST, GIS, RS, MGEO, SUTN

Martha Bostwick
Dip. Cartography, NSCC-COGS | BA Geography, SMU

Program(s):
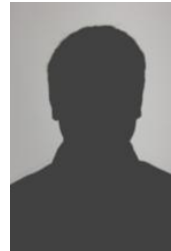*GIS: Cartography and Geovisualization, SUTN, MGEO*

Rob Hodder
MSc. Applied Geomatics

Program(s):
RS, GETG, GDA, GIS
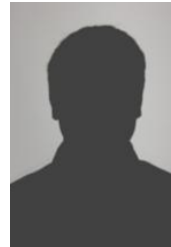
Steven Edwards
PhD, MA, Archaeology, UoT

Program(s):
GDA

David Kristiansen
BA (Communications)

Program(s):
ITPROG

Jillian Ejdrygiewicz
BSc. Marine Biology \ Dip. Cartography

Program(s):
GIS: Cartography and Geovisualization, ESET, MGEO, GIST

Brad Lilly

Program(s):
Geomatics Technical Assistant

Troy Greene
P.Eng.

Program(s):
SUTN, GETG, MGEO

Kevin Lombard
NSLS, P.Surv., P.Eng.

Program(s):
SUTN, GETG

Darren MacKinnon
BSc. Geology, Post Grad GIS

Program(s):
GIS, ITPROG

Richard Phelan
Dip. Surveying, NSLSI \ BSc. SE, UNB \ MEng. GGE, UNB \ Training the Trainer, AMA

Program(s):
SUTN, GETG

David MacLean
BSc Math, Acadia \ BEng Mech. Eng, TUNS \ Adv. Dip. Sci Comp Prog, COGS-NSCC

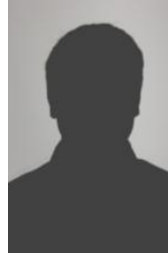**Program(s):**
GIS, RS, GDAA. MGEO, GIST

James Rapaport
BSc., MSc.

Program(s):
GIS, GDAA

Don MacLean
Dip. Geomatics, Algonquin College

Program(s):
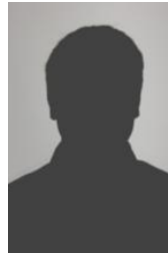*SUTN, GETG, ITPR, GIS, Casual Faculty*

Sharla Rolfe-Hunter
Dip Comp Sci & Tech, Cert Mgmt. Info Sys, North Island College

Program(s):
ITPROG

Lee Morden A.L.S.
BSc. Agr \ BSc. Eng \ MSc.

Program(s):
SUTN, GETG

Ed Symons
Dip, Planning, COGS-NSCC

Program(s):
SUTN, GETG, ITPROG, GIST

Jim Norton
MSc. GIS and Science

Program(s):
RS, SUTN, GETG

Ron Taylor
MScF, RPF

Program(s):
FGBT, GDA, GIS

Alfred Parks
BA-IT Mount Saint Vincent University, CNE, MCP, A+

Program(s):
ITPROG

Marcela Soto Trujillo
BSc. Surveying Engineering, Post Grad GIS Certificate

Program(s):
Geomatics Technical Assistant: GIS, RS

The Year in a Gram

Halloween 2023

goGEOMATICS

Chronicles of Moments. Each snapshot tells a story, and every memory is a brushstroke in the canvas of time.

CIS DAY 2023

Attention Employers:

Thank you for taking the time to read the 2023-2024 Graduate Profile booklet. If you are interested in posting a job description to us, or contacting any of the students, please follow the Guidelines for Employers below.

Guidelines for Employers:

1. Send via email, a brief job description detailing the nature of the position, the qualifications required, (with perhaps the salary or salary range).

2. After reviewing the list of candidates in the *2023-2024 Graduate Profile* booklet and submitting a shortlist to the faculty at COGS, employers may ask COGS to connect students with them.

3. COGS Graduate/Employer Agreement: The details of the employment agreement are the responsibility of the employer and graduate.

4. Note that NSCC faculty and staff are unable to provide references for students unless the student has provided them with written consent. Students should talk with their staff member to ask for a reference first. They then would complete the Consent to Release Information form for each opportunity that they seek a reference for. We are unable to provide information about our students without this completed consent form for each opportunity.

5. NSCC has employer resources for [Student and Graduate employment](#).

6. Employers can post a job on our NSCC site. [Post a job and hire an NSCC student or graduate. | NSCC](#) . On our [Hire a student or alumni](#) page you can learn more about how you could hire a student for a paid or unpaid position.

7. Job postings can be crossed posted on our private COGS Jobs Facebook page by sending ads to Angie Publicover angie.publicover@nscc.ca. This private group has over 700 members of students and alumni.

To discuss employment opportunities for graduates or further information, please contact the lead faculty listed for the program of interest.

Endnote: version as of 6 Feb 2024 - JDM

Centre of Geographic Sciences
COGS | *nscc*

Remote Sensing
Marine Geomatics
Geographic Information Systems
Cartography and Geovisualization
Geographic Information Systems - Technician
Forest Geomatics and Biometrics Technology
Geomatics Engineering Technology
Geospatial Data Analytics
Information Technology
Survey Technician