Scott V. Hatcher

Geospatial Technician

Contact

5 Glenmore Ave.,
Halifax, Nova Scotia,
B3N 1W3

+1 (782) 234-3691

scott.v.hatcher
@gmail.com

Portfolio

svhatch.
github.io

GitHub

github.com/
svHatch

LinkedIn

linkedin.com/in/
svhatcher

Scripting

R, Python (vanilla, arcpy, python-qgis), Bash, IDL, & EASI

Software

QGIS, GRASS GIS, Shapely, Rasterio, ESRI ArcGIS suite, ENVI, PCI Geomatica, ERDAS Imagine, OSSIM, Orfeo Toolbox, MicroStation

Education

July 2016 — **Earth Observation Summer School** — European Space Agency - ESRIN (Italy)
An intensive two week course designed for early career scientists focused on currents trends in Earth Observation data and analysis, as well as practical training in methods of data assimilation for Earth system modelling.

2010–2013 — **M.Sc.** in Geography — Memorial University, St.John's, NL, Canada
People at the tidal flats: coastal geomorphology and hazards in Iqaluit, Nunavut
A thesis exploring GIS storm water modelling to assist adaptation planning to climate change within the city of Iqaluit, Nunavut, Canada.

2009–2010 — **A.Dip.** in Remote Sensing — Centre of Geographic Sciences, Lawrencetown, NS, Canada
Specialization in photogrammetry and LiDAR

2005–2009 — **B.A.** in Music and History — St. Francis Xavier University, Antigonish, NS, Canada
Specialization in latin american history

Experience

Full Time

2018–present — **PrecisionHawk Ltd.** — Raleigh, N.C., U.S.A.
Technical Lead

As technical lead I manage a team of four geospatial scientists. Additionally, I plan the technical vision and implement the development of our algorithms. This role requires a mixture of soft skills and technical skills.

2016–present — **PrecisionHawk Ltd.** — Raleigh, N.C., U.S.A.
Geospatial Scientist

My role as Geospatial Scientist is to facilitate collaboration with external companies and with academia to develop projects that investigate novel uses of UAV collected imagery. I act as a technical liason with companies to collaboratively design proof of concept approaches to solving problems with UAV remote sensing. This requires geospatial development to analyze LiDAR, Multispectral, and Thermal data collected by a UAV platform.

2016 — **eCoast Ltd.** — Raglan, New Zealand
Intern

During my internship I was charged with designing and facilitating a data warehousing exercise, using Python and SQL ETL scripting, in collaboration with the Hawkes Bay Regional Council. Furthermore, I assisted with the development of Python software used for bulk downloading ECMWF wave model outputs.

2015–2016 — **University of Otago** — Dunedin, New Zealand
Research Assistant

As part of a research team I assisted a project investigating coastal foredune dynamics in an urban setting. I provided field assistance for two trips to Mason Bay on remote Stewart Island.

2014 **Geological Survey of Canada** Dartmouth, NS, Canada
EG-II GIS Analyst

Using the CanCoast geodatabase of Canadian coastal spatial data, I developed, coded, and implemented a vulnerability and sensitivity index GIS layer for the entire coast of Canada. I was part of a team working to develop relevant coastal layers for adaptation planning in Canada.

2012-2013 **Sustainable Communities Initiative** St.John's, NL, Canada
Geomatics Technician

As part of a team of four, I worked to design an opensource geodatabase that would hold relevant layers for community planners in the Inuit communities of Nunatsiavut in northern Labrador. Once designed, we worked closely with the Nunatsiavut government to conduct field work that would collect the data to be housed in the database.

Freelance Contracts

2015 **University of Otago** Dunedin, Otago, NZ
Python developer

Collaborating with a team in the Departments of Archaeology and Surveying, I was hired to program an automated method of detecting distinct rock carvings from terrestrial LiDAR and white-light scanning data. The carvings were from the Moriori people on the Chatham Islands in the Pacific.

2014 **Gabarus Historical Lighthouse Society** Gabarus, Nova Scotia, Canada
Consultant

I wrote a report for the Gabarus Lighthouse Society on the state of coastal change surrounding the lighthouse. This analysis was based on historical aerial photo interpretation, as well as a geomorphological interpretation of the site.

Communication Skills

2013 – 2015 **Workshop facilitator** Memorial University & University of Otago
I have facilitated three workshops. One on the Wordpress CMS, one on the "Docear" software suite, and one on the OpenStreetMap Humanitarian deployment software.

2010 – 2014 **Conference presenter** Various conferences
I have given oral presentations at eight scientific conferences, and at one history conference.

Interests

professional: coastal morphodynamics and modelling, remote sensing, GIS, coastal engineering and management **personal:** surfing, travel, music, programming, geography

Publications

article in peer-reviewed journal

Coastal hazards in an expanding Arctic municipality: Iqaluit, Nunavut.
S.V. Hatcher, D.L. Forbes
Arctic *68.4 (2015). Arctic Institute of North America, 2015*

conference proceedings

Coastal Hazard Assessment for Adaptation Planning in an Expanding Arctic Municipality

S.V. Hatcher, D.L. Forbes, G. Manson

The Sustainable Development of Coastal Communities: Challenges and Solutions, 2012, Port-of-Spain, Trinidad

research technical reports

Coastal geoscience field work near Iqaluit, Nunavut, 2009-2011

S.V. Hatcher, D.L. Forbes, G. Manson

Geological Survey of Canada Open File Report GSC-7653, 2014

References

References available upon request.