P: (206) 307-6044 E: henryflanagan@gmail.com

#### **Skills Summary:**

- Three years of experience using ArcMap and other ESRI software for geospatial analysis
- Experience with other GIS software including ArcPro, QGIS, and Google Earth Engine
- Use of R and Python to process satellite data, including Landsat time series data
- Knowledge of conservation and natural resources concepts in the context of geomatics
- Experience with Microsoft Office Suite, especially Excel and Word

#### **Education**:

University of British Columbia, Vancouver, BC Master of Geomatics for Environmental Management August 2018 – May 30, 2019 (Expected Graduation)

University of British Columbia, Vancouver, BC Bachelor of Arts, Major in Geography (Environment and Sustainability) September 2014 – April 2018

## **Work Experience**:

# MGEM Program Assistant UBC Faculty of Forestry, Vancouver, BC

May 2017 - May 2018

- Worked under the program director of the UBC Master of Geomatics for Environmental Management program to build program resources and provide support to faculty and students
- Constructed the program website with WordPress, including using ArcGIS Online to make an interactive embedded map that showed where students were from and creating resource pages for geospatial data sources and job pages
- Communicated with faculty and student cohort to organize events and meetings
- Provided support to postgraduate students in the remote sensing laboratory by doing data entry, designing figures, and manual accuracy assessment in ArcGIS
- Gained experience with finding geomatics resources, planning and organizing events, performing academic research, and geospatial opportunities and technologies

#### Sales Associate Sherwin-Williams, Seattle, WA May - August 2015, June - August 2016, June - August 2018

- Worked in a retail position at a Sherwin-Williams paint store
- Assisted customers by processing transactions, answering phone calls, preparing paint, helping with color selection, etc.
- Gained valuable experience in customer service, phone and internet communication, and stocking/maintaining a store
- Used computer systems to enter customer data, manage customer accounts, and find product information

#### Varsity Event Staff UBC Athletics & Recreation, Vancouver, BC

August 2016 - March 2017

- Participated in the University of British Columbia's Work Learn program
- Worked multiple shifts in most weeks while taking classes as a full-time student, which made me better at managing my time as I balanced school and work
- Performed a variety of duties at various athletic events, including security, ticket taking, ushering, and many event specific tasks

#### **Relevant Projects and Coursework:**

## Boreal Forest Greening and Browning Trends and Association with Topography September 2018 – Present

- Worked independently on a geospatial research topic as the culminating project of the MGEM program
- Analyzed 32 annual Landsat composites covering an area of boreal forest in northern Canada
- Determined water areas using unsupervised classification and acquired disturbance data to mask disturbed and water areas from analysis
- Derived NDVI (vegetation index) using ArcMap, and determined greening/browning trend for each perpixel time series using statistical tests performed using R
- Grouped pixels into topographical classes to examine the association between productivity trend and elevation, slope, and aspect
- Wrote a complete research document with methods, results, discussion, etc.

### Capability and Suitability Analysis for Ski Slopes in Lower Mainland BC

Fall 2017

- Completed a final project for UBC course 'Advanced Geographic Information Science' using ArcMap
- Acquired and used elevation, slope, and land use datasets for southwest British Columbia to perform a binary capability analysis for ski slope development
- Used five datasets (slope, elevation, aspect, snowfall, distance from roads) to perform weighted multi
  criteria evaluation to predict which areas in the study area were most suitable
- Summarized my data, methods, results, and discussion on a WordPress blog site

#### **Volunteer Experience**:

#### UBC Botanical Garden Mapping Project

Winter 2018 - Present

- Joined a volunteer team working on surveying and mapping the UBC botanical garden
- Used a mobile GPS unit to record coordinates of paths, trees, and other features in the garden
- Processed data in ArcMap to create usable shapefiles for garden staff

#### Mapping Project in Cartography Course

Winter 2015

- As a final project for a UBC cartography course, I volunteered to make a map for the Marine Education and Research Society (MERS) using data they had gathered
- Used Excel data to create a map of whale/porpoise sightings and vessel tracking data from by processing this data with GIS software (ArcMap) and Adobe Illustrator
- Coordinated and stayed in steady communication with MERS staff in order to fit map to their needs, which included sending in multiple drafts and asking clarifying questions