Personal & Professional Application of ESRI Software in 2022 - 2023
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Over the past year, I have used Esri / Esri Canada products to power my expedition into the world of Geographic Information Systems. From planning trips into the backcountry with ArcMap, conducting risk analysis in ArcGIS Pro, learning to develop hydrology models using Arc Hydro, to publishing my first map service using Arc Enterprise server. The Esri suite of products has been an indispensable environment to experiment, learn and and create in.

Products and services used

Total suite of products and services I have used to complete assignments or projects, or have experimented with independently in the last 12 months:

- ArcGIS Map
- ArcGIS Pro
- ArcGIS Online
- ArcGIS REST API
- Arc Hydro
- ArcGIS Survey 123
- ArcGIS Developer
- ArcGIS Enterprise servers
- ArcGIS Dashboards
- ArcGIS StoryMaps
- ArcGIS API for JavaScript
- ArcPy Python site package
- Esri website documentation and tutorial pages

Percent of projects and assignments completed over the last 12 months (Fleming and personal, excluding survey camp) that leveraged an Esri product or service:
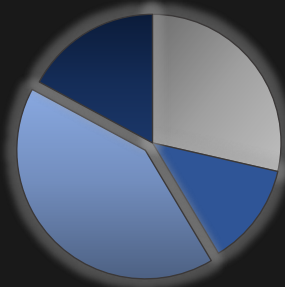
- No Esri Product - 29%
- Any Esri Product - 13%
- ArcGIS Pro - 41%
- ArcGIS Pro plus other - 17%

Project Sample #1 – Solar Panel Site Suitability

This site suitability map was created using ArcGIS Pro. National elevation data was used to experiment with various interpolation techniques (Spline, IDW, TopoToRaster, Kriging, etc.) to create a Digital Elevation Map. The most ideal result was leveraged to create a hillshade, 3D scenes, and derivatives for the multi-criteria decision analysis. This project was completed with one other team member.

Click to view a copy

Project Sample #2 – Tick Toronto Dashboard

Interested in the changing environment within Toronto, this ArcGIS dashboard visualizes the results of tick surveys conducted between 2013 to 2019, in relation to local parks and trails. Survey results were gathered in .csv format from the city of Toronto's data repository, and geolocated using a neighborhood locator built with park data. Spatial joins were used to combine the results with parks and trials. The operational layers were brought into ArcGIS Online for formatting, then imported into Dashboards.

Click to see the Dashboard (AGOL account required)