Geospatial Sciences

Carl Wittmann

http://carlwittmann.github.io

British Columbia Institute of Technology GIS Advanced Diploma (2024)

University of British Columbia B.A. Geography (2023)

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About Me

- Software-agnostic: Flexible, adaptable, and comfortable working with a wide range of tools.
- Fluent in Remote Sensing: Extensive domain knowledge and strong communication skills.
- Multilingual: Functionally literate in Javascript, R, and Python; actively working to improve fluency.
- Analytical: Inquisitive by nature.
- Open source data fan: Familiar with the data catalogues of most space agency missions.
- SAR enthusiast: I almost got a Sentinel-1 tattoo.
 Not even joking. I still have a lot to learn, though.
- Fast learner: If I don't know how to do it, I know how to sit down and teach myself.
- Detail-oriented: Accuracy is important, but so is the ability to quantify margins of error.
- Outdoor enjoyer: Lifelong adventurer with an academic background in earth processes.

GIS/RS Software

- ArcGIS Pro
- QGIS
- ArcGIS Online
- ArcMap
- GRASS
- ESA SNAP
- Catalyst Professional
- L3Harris ENVI

Python Tools

- ArcPy
- Geopandas
- Laspy
- Sarsen
- SentinelSat
- Geemap
- Whitebox Tools

Other Tools

- RStudio
- Google Earth Engine
- VS Code / Notepad ++
- PostgreSQL
- AutoCAD
- Adobe Illustrator
- OpenDroneMap
- ASF Vertex

Javascript Tools

- Leaflet
- Mapbox GL JS
- Cesium
- Mappa
- D3
- Turf
- jQuery

Technical Skills & Processes

- Data Visualization & Technical Communication
- 2D / 3D / Interactive / Web Cartography
- Imagery Processing / Correction / Mosaicking
- Data Segmentation & Classification
- Time Series Analysis & Change Detection
- Synthetic Aperture Radar Techniques
- LiDAR Point Cloud Classification / Feature Extraction
- DEM / DTM / DSM Generation Techniques
- Stream Network & Watershed Modelling
- Land Cover Mapping & Forest Inventories

Relevant Courses

Remote Sensing for Ecosystem Management	FRS1 443
Advanced Geographic Information Science	GEOS 370
Cartography	GEOS 372
Research in Cartography	GEOS 472
Statistical Geography	GEOG 374
Watershed Geomorphology	GEOS 406
Quaternary & Applied Geomorphology	GEOS 308
Meteorology	GEOS 401
Environmental Impact Assessment	GEOG 319
Research Strategies in Geography	GEOG 371