# **Thomas Plazek**

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# Education

University of Pittsburgh, Pittsburgh, PA B.S. in Environmental Science Certificate in Geographical Information Systems

## **Environmental Experience**

#### **Maxar Technologies**

GIS Analyst (Contract)

- Contractor on the Human Landscape Project at Maxar Technologies (specifically working with Chinese imagery and databases, as well as Israel and Palestine imagery due to the 2023 conflict)
- Utilized ArcGIS Pro and ArcGIS Desktop to analyze, clean and reformat relevant Feature Classes and geodatabases
- Used ArcPy heavily to solve problems and enhance the capabilities of existing ArcGIS Pro tools
- Collaborated remotely with managers and teammates to ensure outputs were accurate and being completed in a timely manner.
- Wrote and edited metadata for each Feature Class to ensure accurate information was attached to each geodatabase
- Created several tools using ArcPy to optimize the workflow process for the rest of the team

# Department of History, University of Pittsburgh, Pittsburgh, PA

**GIS** Internship

- Created a historical project about the environmental and social impacts of the Korean war on the Korean peninsula
- Hosted and managed a WordPress site to log progress and updates to the project
- Digitized paper maps using QGIS; Used control points to accurately project the digitized maps
- Worked with QGIS as open-source alternative to the ESRI Suite
- Learned to create a readable and aesthetic ESRI StoryMap
- Improved research skills by locating difficult to find information

## Department of Geology and Environmental Science, University of Pittsburgh, Pittsburgh, PA

**GIS Analyst Assistant** 

- Nov 2022 May 2023 • Assisted Dr. Elad Dente and his team with their research paper using ArcGIS Pro, as well as Google Earth Engine to analyze changes in river centerlines
- Utilized raster and vector analysis to understand river dynamics with continuous outputs fed into a deep learning model
- Created and updated unique point and polygon feature classes containing manually located errors (i.e., river centerline mapping errors and river deforestation) from automatic mapping
- Used ArcGIS outputs to mask errors in a Google Earth Engine model
- Created statistical layers and predictive surfaces within ArcGIS Pro regarding the likelihood of certain types of errors

## Skills

- GIS Analysis
  - o ESRI Suite (ArcGIS Pro; ArcGIS Online; ArcMap)- 3.5 years
  - o QGIS 2 years

Dec 2020- May 2023

July 2023 - Dec 2023

Jan 2023 – May 2023

- Coding in R-language (experience in both Base and Tidyverse) 3 years
- Python scripting (emphasis in ArcPy) –2 year
- ENVI remote sensing software (SQL) Interfaces 1 year
- Detail oriented cartographic work in-depth knowledge of ArcGIS Pro Layouts
- In-depth knowledge of geoprocessing toolboxes, model builder and other ArcGIS Pro and ESRI specific tools
- Experience developing custom ArcGIS Pro toolboxes