Shaam Adam
Minneapolis, MN

EDUCATION

University of Minnesota Twin Cities,   Minneapolis, MN
College of Liberal Arts   May 2023
Bachelor of Science in Geography
Minor in Geographic Information Science

University of Minnesota Twin Cities,   Minneapolis, MN
College of Liberal Arts   May 2027
Masters of Geographic Information Science
Minor in Systems & Industrial Engineering

Professional Experience

GIS Specialist skilled in mapping, web GIS, python (arcpy, geopandas, pandas) and visualizations. Experienced in data analysis, automating geoprocessing workflows and building interactive web applications for decision-making.

Technical Skills

Layer-Based Spatial Analysis
- Automated repetitive geoprocessing tools using arcpy, and pandas
- Publish tools and maintain ESRI ArcGIS Enterprise Servers
- Developed scripts for unique carbon mapping techniques.

Web Mapping & Visualization
- Publish layers to ArcGIS Online and configure web apps.
- Configure custom Arcade and HTML for use in web maps.

Work Experience

U-Spatial – University of Minnesota
Dec. 2022 - Present
GIS Specialist
September 2024 - Present
- Continued to assist the development of a localized Global Climate Geodesign Challenge.
  - Contributing to a major project focused on reducing greenhouse gas emissions through spatial data analysis and tool development.
  - Developed and published custom geoprocessing tools using Python, ArcPy, and the ArcGIS API for Python. Published tools on to ArcGIS Enterprise Server.
  - Served as the first point of contact between users and the broader project team, providing technical support, answering questions, and helping resolve issues related to data, tools, and project workflows.

GIS Technician
June 2023 – September 2024
- Assisting the Statewide Lead Service Line Project
  - Cleaned and organized large datasets, ensuring accuracy for geocoding.
  - Ran and modified existing Python/ArcPy scripts to process spatial and tabular data, ensuring outputs were clean, accurate, and ready for analysis.
  - Utilized Python libraries such as PyPDF2, pdfplumber, and pandas to extract, parse, and structure tabular and text-based data from PDFs for documentation purposes.
- Assisting the development of a localized Global Climate Geodesign Challenge.
  - Identify industrial and mining operations in Northern Minnesota to promote carbon stores and eliminate emissions.
  - Utilizing ArcGIS GeoPlanner to compile climate actions for local study areas.
  - Assisting with miscellaneous GIS projects.
    - Created maps for demographics in the Dinkytown neighborhood in Minneapolis, Minnesota.

Undergraduate Research Assistant

Dec. 2022 – Present

- Assisting the development of Sustainable Development Goals for Minnesota.
  - Utilizing ArcGIS Online to develop web layers and work with HTML for the SDG Hub Site.
  - Cartographic design and mapping.
  - Dashboard creation for hosting data and web maps.