Joe Marks

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OBJECTIVE

I am a grad student enrolled in the GIS Accelerated Masters Program at UW-Madison. I am currently seeking a full time position which will further my experience and put my computer science background and GIS skills to good use. I have experience working in teams and enjoy new challenges.

TECHNICAL EXPERTISE

Strong: Javascript, Leaflet, Object Oriented Programming, Python, ArcMap
Experienced: Carto, C++, Java, Database Management (SQLite), ArcMap, QGIS,
Artificial Intelligence, Human-Computer Interaction, Adobe Illustrator

EDUCATION

University of Wisconsin - Madison GIS Accelerated Masters Program   Fall 2018-Current
- Notable Classes: Interactive Cartography and Geovisualization, GIS Applications, Practicum in GIS Development

University of Wisconsin - Madison Special Student   Spring 2017

University of Wisconsin - Madison B.S. Computer Science, Math Certificate   2012-2016
- GPA: 3.628
- Notable Classes: Database Management Systems, Intro to Human-Computer Interaction, Sociology: Leadership Seminar

ACADEMIC PROJECTS

Green Urbanism | http://bit.ly/2r75WPc
A paper exploring if a spatial correlation exists between access to green space and health
- Performed research on the subject examining similar studies
- Used Model Builder in ArcMap to streamline data processing
- Performed analysis using Moran's I and Hotspot Analysis in ArcMap
- Co-authored an academic paper on the findings

Municipal Urban-Rural Classification | http://bit.ly/33BjJuz
An interactive map / web page created for the WI Office of Rural Health
- Worked directly with client to fulfill requests
- Created lookup functions to work with client's original data layer
- Included functionality to export lookup results

Three Summer Days in Martha's Vineyard | http://bit.ly/37VZACS
A map meant to show off tourist locations in Martha's Vineyard
- Used generated hillshade from DEM as well as land cover data to create realistic terrain
- Adjusted coloring and shadows and added textures to terrain in Adobe Photoshop
- Designed and implemented map icons in Adobe Illustrator

EXPERIENCE

Geospatial Data Science Lab | Member   Fall 2018-Current
- Performed data analysis on road extraction layers to determine connectivity
- Modified existing Python code to run an APLS metric

State Cartographer's Office | GIS Developer - Intern   April 2019-Current
- Worked directly with clients to create a web page for map visualization
- Gained experience managing multiple projects simultaneously
- Worked with Carto software to update SCO databases and visualize data in web applications
- Performed data processing using ArcPy