

MAXWELL R. THORPE

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ADDRESSES

Home: 3902 Buffington Drive, Columbia, Missouri 65203

School: 1134 Munger Graduate Residences, 540 Thompson Street, Ann Arbor, Michigan 48104

EDUCATION

M.S. Information Science, University of Michigan-Ann Arbor May 2023 (expected)

GPA 3.8, Major GPA 3.9

B.S. Russian Language and Literature, University of Wisconsin-Madison May 2021

GPA 3.5, Major GPA 3.7

David H. Hickman High School, Columbia, Missouri May 2018

High Honors (GPA 3.89); AP Capstone Diploma; Geospatial Technology, Geospatial Analysis

EMPLOYMENT

Data Analyst, Socket Telecom May 2022 – August 2022

- Worked as part of team to map and design fiber optic networks for rural customers throughout mid-Missouri. Used relational database management system to maintain/edit proprietary fiber-optic maps.
- Wrote, tested, and implemented data cleaning process for splitting PDF maps of service areas into individual files and assigning files to corresponding shapefiles based on unique identifiers. Used Pytesseract and Numpy libraries to read contents of each PDF before assigning PDF to its respective shapefile within Arc geodatabase.
- Collaborated on front-end development task for improving internal payment order process. Used PHP within XAMPP environment.

Software Engineer, University of Michigan Transportation Research Institute August 2021 – December 2021

- Used CodeIgniter platform to build and test front-end features for Michigan Traffic Crash Facts (MTCF) website
- Wrote and tested script for generating PDF traffic crash analyses using Python

Front-End Developer, Traffic Operations and Safety (TOPS) Laboratory | UW June 2019 – August 2021

- Independently developed Java programs for real-time “crash map” of statewide incidents
- Extended geo-based analysis features in JavaScript & HTML including “density” layers showing frequency of traffic crashes in given areas
- Wrote and published entire user guide for system users (Wisconsin state/county law enforcement)

GIS Intern, Boone County Assessor | Columbia, MO September 2017 – August 2018

- Used orthophoto imagery and LiDAR to update County geospatial databases of structural footprints, forested areas, hydrology, & contours
- Managed datasets in ArcMap & ArcEditor supporting mapping products & parcel information viewer

Apprentice Geospatial Analyst, Center for Geospatial Intelligence (CGI) | Columbia, MO Summer 2017

- Used ESRI software to update base maps of global strategic areas
- Conducted quality-control processes on SQL datasets
- Obtained required federal security clearance. Specific nature of tasks confidential

Independent Projects September 2016 – May 2017

- Completed comprehensive traffic/incident analysis of I-70 corridor in Missouri

- Collected and analyzed traffic data; produced original graphics and maps using ArcGIS software

SERVICE WORK

Curriculum Advisor, Columbia Public Schools

2017 – 2018

- Developed & implemented addition of Humanitarian OpenStreetMap project to entire EEE curriculum

Founder, Humanitarian OpenStreetMap Team | Jefferson Middle School

2016 – 2017

- Initiated participation in global humanitarian relief & development org used by World Bank, International Red Cross (IRC), Clinton Foundations, among others.
- Recruited 50+ participants; Developed & led instruction and labs

SKILLS AND INTERESTS

- Foreign languages: Russian (proficient writing & speaking); Spanish (fluent writing and speaking)
- Software engineering: Java (advanced); JavaScript (intermediate); HTML/CSS (intermediate); Python (advanced); SQL (intermediate); ArcGIS (advanced)
- Software frameworks: Django, React.js, React Native, Spring, Apache Struts
- Personal: Bassist, Saint Louis Youth Orchestra, Missouri All-State Orchestra;
Life-long interest in maps & geographic systems