

MAXWELL R. THORPE

mrthorpe@umich.edu | 573-355-6413

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

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

- Developed traffic crash analysis datasets using Python/XML
- Built process for generating PDF traffic crash analyses using Python

GIS 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 (intermediate); SQL (intermediate); ArcGIS (advanced)
- Personal: Bassist, Saint Louis Youth Orchestra, Missouri All-State Orchestra;
Life-long interest in maps & geographic systems