

SKILLS

- R, basic Python
- Development of interactive dashboards, web apps, and data visualizations
- R package development
- CSS, HTML
- Statistical analysis (time series, linear reg, risk ratios)

R PACKAGES

- dplyr, data.table, sf, janitor, purrr, gt
- Shiny, Markdown, Quarto
- flexdashboard, leaflet, plotly, ggplot2, golem
- RSQLite, duckdb

EXPERIENCE

Wisconsin Department of Transportation

Madison, WI

Highway Safety Data Analyst

May 2019 – Present

- Developed a Crash Dashboard in Shiny with multi-selection capabilities and a dynamic map
- Wrote a parameterized R Markdown to fully automate the creation of 72 crash data county profiles (tinyurl.com/yckw8v6s)
- Developed an R package to make data pulls and data analysis much easier inside an R environment
- Used an API to collect court case data then flattening JSON file, cleaning data, and running analysis
- Fulfill data requests on a daily basis using R notebooks for analysis and data viz and knitting to Powerpoint, HTML or CSV

Mandli Communications

Madison, WI

Data Processor

Dec. 2016 – May 2019

- Analyze, classify, and process LiDAR data maintaining above average speed, occasionally perform quality control

Wisconsin Department of Transportation

Madison, WI

Traffic Forecaster (Part-time)

Feb. 2014 – July 2015 & Feb. 2017 - June 2018

- Completed statewide traffic forecast requests using travel demand models and regression analysis of historical counts
- Provided expertise on completed forecast requests to MPOs, DOT regions and consultants
- Conducted research and learned VBA to develop a macro-enabled Excel worksheet, improving and streamlining the department's method to forecast turning movement counts

Wisconsin Department of Transportation

Madison, WI

Bicycle and Pedestrian Intern (Part-time)

Mar. 2015 – July 2015

- Learned ADA standards in order to digitize and assess statewide curb ramps and sidewalks in ArcMap
- Learned about bike/pedestrian safety and design and the benefits of complete streets through five day-long courses

Dane County Board of Supervisors

Madison, WI

Planning Intern

June 2013 – Dec. 2013

- Updated thirty maps, chapter information and socioeconomic data for the 5-year update on the Comprehensive Plan

National Center for Freight and Infrastructure Research and Education (CFIRE)

Madison, WI

Research Assistant

May 2013 – May 2014

- Streamlined a set of ArcMap tools in ModelBuilder to transform data and to analyze business hot spots

AWARDS

2022 Data Science Olympian: Collaborated with a team to compete in a **Kaggle Challenge** with Women in Big Data (WiBD)

WisDOT Crash Dashboard won runner-up under **Interactive Map category:** 2021 Wisconsin Land Information Association map contest (http://jacciz.shinyapps.io/Shiny_Crashes)

EDUCATION

University of Wisconsin – Madison

M.S. Urban and Regional Planning
2014

University of Wisconsin – Oshkosh

B.S. Geography (GIS) and Urban Planning
2010