

Experience

Cyberinfrastructure Engineer - Great Lakes Observing System

Ann Arbor, MI, May 2021 - present - about 5 years

- Worked with organization partners on long-term procedures (NDBC and NCEI)
- Producing high level documentation for critical operational certification and overall operations
- Re-engineered caching for data endpoints of interest for speed
- Assembled and successfully demonstrated an application for key partner
- Maintaining operations during the organization's migration to cloud computing
- Providing technical guidance for the organization's project portfolio
- Worked with development partners through scrum sprints to improve products
- AWS, Terraform, Kubernetes, Pythonic Docker, R, Shell, SQL (PostgreSQL, RedShift), JavaScript

General Programmer/Analyst - Cooperative Institute for Great Lakes Research (CIGLR)

Ann Arbor, MI, January 2012 - April 2021

- Developed, maintained over *10* data driven web pages for projects being performed by NOAA-GLERL in partnership with CIGLR, effectively communicating scientific observations
- Produced plots and tables of processed data which supported over *20* publications, presentations, and scientific posters (average about *2-3 per year*)
- Slurm, Python, R, Shell, SQL, JavaScript, PHP, FORTRAN, WordPress, Drupal
- [ORCID: 0000-0002-1896-1390](#), [CIGLR Profile](#)

Skills

- LLM Software development with GitHub Co-Pilot and Claude Code
- Document drafting with Google Gemini followed up with manual review, editing
- Kubernetes administration - pod management, logging, exec, cluster upgrades
- Terraform infrastructure as code
- AWS Codebuild, deployment connected to GitHub/Git
- Full-stack web development: JavaScript, PHP, composer, BASH, PostgreSQL
- REST(ful) APIs and database ORMs - Django
- Big data ETL (Extract, Transform, Load) - R, Python, FORTRAN

Community

Sheffield Square I Condominium Association Board - President 2021 - Present

City of Saline - Parks Commissioner since 2023, Chair since 2025

Education

B.S. - 2012 - University of Michigan, Ann Arbor, MI - Data Science