HANNAH VANWINGEN

Software Engineer, Data & Visualization

Detroit, MI

hvanova.github.io

Experienced software engineer in web development and data engineering with strong analytical skills, seeking roles in interactive frontend engineering with a preference in data visualization and tool development. My passions surround social design, sustainable practice, environmental awareness through community engagement, storytelling, and statistical approaches that inform accessible data platforms.

WORK EXPERIENCE

Lark Health Technologies

Software Engineer II, Data Engineering and Visualization

June - Dec. 2023

Remote

- Designed and implemented data parsing, transformation, and quality assurance pipelines using Scala and Spark
- Initiated data tracking using the Soda data quality platform to enhance observability and bolster data reliability
- Optimized complex data processing workflows, ensuring timely delivery while minimizing resource utilization

Software Engineer I, Data Engineering and Visualization

iii Jan. 2022 - June 2023

Remote

- Led the development of a configurable and automated data reporting service in React
- Collaborated with cross-functional teams to design and implement data visualizations using D3.js
- Demonstrated commitment to ensuring reliable data systems performance by participating in on-call responsibilities using Opsgenie
- Documented product requirements and metric calculation details and to maintain data integrity and capture best practices for further development and addressing common issues

Michigan Aerospace Corporation

Research Scientist, Data Visualization

Ann Arbor, MI

- Led the development of a highly interactive and configurable D3.js data visualization library that enables users to explore complex datasets for time series, confusion matrices, stacked bar graphs, 2D Gaussian distributions, and networks
- Wrote a grant proposal to the US Department of Energy for a data sharing platform that automates the processing of raw data files by detecting data types and displaying an optimal visualization to showcase trends, correlations, distributions, and anomalies

University of Michigan Digital Projects Studio

Data Visualization Intern

Sept. 2018 - May 2019

Ann Arbor, MI

- Collaborated in designing and implementing a unique and interactive multidimensional data visualization for text citations using D3.js
- Created an interactive tutorial for network-based data modeling and statistical analysis in Python using Jupyter Notebooks, providing an accessible platform to learn and apply cutting-edge statistics

EDUCATION

B.S.

Physics, Complex Systems, Computer Science

University of Michigan

- Sept. 2015 Aug. 2019
- Ann Arbor, MI

CERTIFICATIONS

Techniques and Frameworks for Data Exploration

SKILLS

Languages

- JavaScript Advanced
- TypeScript Advanced
- HTML Advanced
- CSS Advanced
- Python Advanced
- SQL Advanced
- Scala Intermediate

Frameworks

- React Advanced
- Next.js Advanced
- Vue.js Intermediate

Libraries

- d3.is Advanced
- **jQuery** Intermediate
- Pandas Intermediate
- NumPy Intermediate

Platforms

- Git Advanced
- AWS Intermediate
- ArcGIS Beginner

VOLUNTEER WORK

826 Michigan

Creative writing tutoring

March 2024 - Present

Swords Into Plowshares Peace Center and Gallery

Jan. 2024 - Present