HANNAH VANWINGEN

Software Engineer, Data & Visualization

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⚲ Detroit, MI

⚙ hvanova.github.io

From research and design to development and testing, I craft a nuanced understanding of software capabilities to support human well-being, tell impactful stories, and inspire equitable growth. Experienced in both academic and corporate environments, I am seeking roles in engineering and analytics where development is socially and statistically informed.

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
- Supported a newly hired data analytics team in documenting data workflows, best practices, and troubleshooting

Software Engineer I, Data Engineering and Visualization

📅 Jan. 2022 – June 2023   ⚲ Remote

- Led the development of a configurable and automated data reporting service in React using JavaScript/TypeScript and Next.js
- 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 to maintain data integrity and capture best practices for further development and addressing common issues

Michigan Aerospace Corporation

Research Scientist, Data Visualization

📅 July 2019 – June 2020   ⚲ 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 detection of data types and anomalies and displays an optimal and interactive data visualization

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

📅 Oct. 2022 – Dec. 2022

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.js – 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