HANNAH VANWINGEN-ECKERTOVA

Software Engineer, Data & Visualization

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From research and design to development and testing, I advance software capabilities to support human well-being and tell impactful stories. With experience in both educational and business environments, I seek socially and statistically informed projects that promote equitable and progressive growth.

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