## HANNAH VANWINGEN-ECKERTOVA

## **Software Engineer, Data & Visualization**

nvanova.github.io

From research and design to development and testing, I work to tell powerful stories and develop nuanced understandings that empower action through accessible and interactive data engagement. Experienced in research and software engineering, I am seeking roles in data analytics and/or frontend engineering with a preference for interactive data visualization and tool development.

#### **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

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 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 datasharing 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

#### **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