# HANNAH VANWINGEN-ECKERTOVA

# Software Engineer - Full Stack, Data, & Analytics

nvanova.github.io

Committed to sustainable and equitable development, I create robust solutions for strategic initiatives. My cross-functional expertise has cultivated a career focused on interdisciplinary collaboration, designthinking, scalable implementation, and comprehensive quality assurance. I am excited to learn, build, and connect.

#### **WORK EXPERIENCE**

#### Lark Health Technologies

## Software Engineer II, Data Engineering and Visualization

Jan. 2022 - Dec. 2023

- Remote
- Led the Agile development of an automated data reporting service in JavaScript/TypeScript and CSS using React and Next.js, working closely with stakeholders to define and implement business metrics
- Collaborated with cross-functional teams to design and implement responsive data visualizations in D3.js for custom business reports
- Built Scala transformers for data parsing, transformation, testing, and cataloging; processed with Spark, orchestrated with Kubernetes, and scheduled with Airflow
- Developed data pipeline quality assurance alerting using the Soda platform in Databricks to upgrade observability for stakeholders
- Documented technical product requirements and detailed metric calculations to capture version release changes for data services
- Managed data loading and storing privileges in AWS S3
- Optimized complex data joins and queries, reducing latency by 50%
- Contributed to a functional and SOLID-principled DAG development component library
- Mentored a newly hired analytics engineering team in data transformation workflow and troubleshooting
- Demonstrated commitment to ensuring reliable data systems performance by participating in Opsgenie on-call rotations

# Michigan Aerospace Corporation

#### Research Scientist, Data Visualization

- Ann Arbor, MI
- Led the development of a responsive and interactive data visualization library in D3.js using React
- Developed, tested, and published open-source NPM packages with UI components for standardized web app development
- Implemented a data ingestion pipeline using DroneDeploy API, ensuring real-time data streaming and processing
- Designed, implemented, and tested a geographic heatmap visualization using GeoJSON files and ML classification output
- Developed an image classification model in Python to detect vector fields, creating training sets for Al applications

# University of Michigan Digital Projects Studio

#### **Data Visualization Intern**

- Ann Arbor, MI
- Designed and implemented a responsive and interactive data visualization web app in D3.js using React and Node.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

∂ (616) 481-1080® Detroit, MI

#### **EDUCATION**

#### **Bachelor of Science**

Physics, Complex Systems, Computer Science

#### **University of Michigan**

- Sept. 2015 Aug. 2019

#### **CERTIFICATIONS**

# Techniques and Frameworks for Data Exploration

Oct. 2022 - Dec. 2022

#### **SKILLS**

### **Object-Oriented Programming**

- Python Advanced
- C++ Experienced
- Scala Experienced

#### **Data & Analytics Engineering**

- Snowflake Advanced
- Databricks Advanced
- Apache Spark Experienced
- Kubernetes Experienced

#### **Data Science**

- SQL Advanced
- Pandas Experienced
- Scikit-learn Experienced
- PyTorch Experienced
- TensorFlow Learning

## **Cloud Deployment**

- AWS Advanced
- Airflow Advanced
- Docker Advanced

#### Web App Development

- JavaScript Advanced
- TypeScript Advanced
- HTML/CSS Advanced
- React.js Advanced
- Node.js Experienced
- Next.js Advanced
- Vue.js Experienced
- Svelte Experienced
- Django Experienced
- Flask Experienced

#### **Design & Visualization**

- Figma Advanced
- D3.js Advanced
- Tableau Experienced
- ArcGIS Experienced