ERIK HASSE, Ph.D.

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507 · 995 · 3159

SUMMARY

Machine Learning Engineer passionate about deploying scientific computing into the real world. Experienced in Python and Scala with a focus on time series forecasting and optimization. Excited about sharing knowledge and helping the team succeed.

TECHNICAL SKILLS

Languages	Python (8 years), SQL (5 years), Scala (1 year)
Python packages	Pandas, NumPy, Scikit-Learn, Plotly, Matplotlib, Pydantic, FastAPI, Streamlit, Django ORM, SQLAlchemy, Pytest, Scalene
Scala packages	Akka, Akka-HTTP, Tapir, Circe, gRPC, Scalatest
Tools	Bash, Git, Docker, Jenkins, Github Actions, Jira, MLFlow, Cloud providers (AWS, GCP, Azure)

RELEVANT EXPERIENCE

Fermata Energy   Vehicle-to-everything platform provider
Staff Machine Learning Engineer   *August 2022-Present*

· Design and implement a package for simulating bidirectional electric vehicle chargers in Python to support market research, model development, and site optimization
· Integrate backend services with third-party APIs to receive signals from utilities and market operators
· Develop an orchestration service in Scala to conditionally run optimization models
· Deploy models and optimization services into a production environment using REST APIs, gRPC services, and Argo Workflows
· Support team members through code reviews, pair programming, and sharing best practices

Lowe's Home Improvement   Nationwide retailer
Lead Machine Learning Engineer   *December 2019-July 2022*

· Developed a platform for data scientists to track, store, and deploy their models as an API
· Implemented time series models predicting sales of thousands of items across 1700 stores to optimize workforce scheduling, improving margins by over $10 million per year
· Created a platform for automating forecasting and time series anomaly detection and provided other data scientists with tools to build models on this platform

Freddie Mac   Mortgage backer and insurer
Senior Data Scientist   *October 2018-December 2019*

University of Iowa
Mathematics Teaching Assistant   *August 2013-May 2018*

EDUCATION

University of Iowa
Ph.D. in Mathematics   August 2018
M.S. in Mathematics   May 2013

North Dakota State University
B.S. in Mathematics, Minor in Computer Science   May 2013