# ZOE FARMER

Data Scientist / Machine Learning Engineer

Data Scientist / Machine Learning Engineer

Square (San Francisco, CA)

04/21-Current

Built, tuned, and deployed machine learning models to support high-value stakeholder initiatives such as product value and anomaly detection.

Established mature data & machine learning ecosystems to support modeling work.

Supported a large product team with a wide array of data science and modeling requests while additionally managing contracted roles to provide additional team bandwidth.

Data Scientist

Red Dot Storage (Louisville, CO)

04/19-04/21

Built, tuned, and deployed key financial models to optimize the core revenue management platform.

Supplied leadership with a narrative-driven approach to critical insights into customers, markets, and strategy via statistical modeling, analytics, data-driven validation, and machine learning.

Data Scientist / Data Analyst / Lead Developer
Talus Analytics (Boulder, CO) 01/18-04/19

Focused on integrating data analysis, visualization, and design

Responsible for the full-stack development & technical direction of several analytics dashboards with emphasis on public health and global security.

Data Scientist / Software Engineer Nidhogg Consulting (Boulder, CO)

03/16-01/21

Co-founded as Chief Data Scientist and lead Software Engineer.

Responsibilities included project management, full stack web development, data science projects, and new job acquisition.

Applied Math Research Assistant University of Colorado, Boulder (Boulder, CO)

09/15-05/17

Used machine learning models on gathered experimental lab data to predict data quality.

Developed and implemented a massively parallel simulation framework to analyze the behavior of soliton gasses in onedimension systems.

Presented at the 2016 & 2017 Society for Industrial and Applied Mathematics (SIAM) student conferences

Data Management Assistant

National Snow and Ice Data Center (Boulder, CO) 08/12-05/13

Large scale ETL tasks involving terabytes of research data and heavy applications of optimized Python data ingestion.

#### Contact

Denver, Colorado

**(**719) 233 3514

zoe@dataleek.io

github/thedataleek

## Programming

Python SQL Javascript / HTML / CSS Regular Expressions Bash / Shell Scripting

#### **\$**Tools

Machine Learning, Classification, Regression, Anomaly Detection, Natural Language Processing (NLP), Large-Language Models (LLMs), Retrieval-Augmented Generation (RAG)

Amazon Web Services (AWS), Google Cloud Platform (GCP), Databricks, Prefect, Snowflake

Pandas, Numpy, Scipy, NLTK, Flask, Asyncio, Jupyter, Git

Matplotlib, Holoviews, D3, Graphviz, Looker, PowerBI

CI/CD, Agile Development, Unix, Docker

### **≥**Education

Applied Math B.S Computer Science Minor University of Colorado Boulder May, 2018

# ZOE FARMER

· Data Scientist / Machine Learning Engineer

Data Scientist Internship Khan Academy

2016

Built a probabilistic and Markov-chain network infection model for the interview (github.com/thedataleek/kahn-interview). Developed new features, enhanced metrics, and maintained khanacademy.org. Used investigative analytics to research SAT test scores. Developed a generalized learning model to assist with student growth and projection estimates for the SAT preparation tool.

Data Scientist Internship Shutterstock

2015

Created an Apache Spark application to handle large scale ETL tasks on top of Shutterstock's Hadoop platform, as well as deployed and developed in-house big-data solutions

Data Scientist Internship SpotXChange

2014

Developed an automatic Tableau Server reporting tool based on the semi-public API. Analyzed time-series data in an effort to identify similarities and overlapping data. Created a probabilistic model to analyze potential single-threaded scheduler optimizations

Data Visualization Internship

2013

Created network data visualizations based on packet transfer data using common visualization libraries and tools. Responsible for challenges and solution implementations for the 2013 security Capture the Flag event.

### Projects

- øPyColorado 2019 Board

- Ø Discord Chat Plugins
   Hackathon Winner SQL/GPT4
   D3 Framework



Sewing Dungeons & Dragons Martial Arts Video Games



References Available Upon Request