

Education

Metropolitan State University of Denver

Denver, CO

BACHELORS OF SCIENCE - STATISTICAL SCIENCE | MINOR - COMPUTER SCIENCE

Jan. 2021 - Dec. 2023

- GPA: 3.86
- Graduate Honoree: Mathematics and Statistics Department
- Honors: Cum Laude

Community College of Denver

Denver, CO

ASSOCIATE OF SCIENCE - PSYCHOLOGY

Aug. 2018 - Dec. 2020

- GPA: 4.0

Experience

FinGoal

Lafayette, CO

DATA SCIENCE INTERN

Jun. 2022 - Dec. 2023

- **Data Aggregation Management Tool:**
 - Built an end-to-end tool that summarizes user spending using **Pandas**, **Flask** and **Heroku**.
 - Leveraged modular pandas code for custom and importable aggregations that allow for additions from non-technical staff.
 - Self managed the project and handled all cross-team collaboration to ensure project met business needs.
- **Named Entity Recognition Model:**
 - Fine tuned a pre-trained large language model (LLM) using the **Transformers** library to identify key parts of transaction data.
 - Created a capable model leveraging only a small labeled dataset with approximately 200 rows of raw transaction data.
 - Utilized a wide array of pre-processing techniques to find a balance between clean text and real world model performance.
 - Leveraged **AWS Sagemaker** and a custom **Docker** image to allow for reliable and affordable access to the model.
 - Built the entire knowledge base for deployment of large language models at FinGoal. All work was condensed into detailed tutorials to allow for ease of reproducibility by future Data Scientists.

MSU Denver

Denver, CO

MATHEMATICS AND STATISTICS DEPARTMENT

Aug. 2023 - Dec. 2023

- **Pompeii Research:**
 - Collaborated with an archaeologist and statistical expert to aid in exploratory and statistical analysis of data.
 - Worked with a hand-crafted data corpus created over the course of 14 years of research.
 - Performed extensive data-preprocessing and variable selection to compensate for lack of standardized data.
 - Informed collaborators of the importance of data standards and virtual environments for future ease of analysis and reproducibility of results.

Tools and Skills

Languages	Python, R
Data Science Frameworks	Pandas, Numpy, Jupyter, Dplyr, Quarto
Machine Learning Frameworks	Transformers, SpaCy, Tidymodels, Sklearn
Natural Language Processing Skills	Named Entity Recognition, Multi-Label Text Classification, Model Fine Tuning
Machine Learning Skills	Binary Classification, Linear Regression, Multiclass Classification
Data Visualization	Matplotlib, GGPlot, Plotly, Leaflet
Web Frameworks and Tools	Flask, Heroku, Postman, R Shiny, R Blogdown
Amazon Web Services	Sagemaker, Elastic Container Registry (ECR), Simple Storage Service (S3), Identity and Access Management (IAM)
Infrastructure	Git, Docker, Poetry, Venv, Pyenv, Renv

References

Zoë Farmer

DATA SCIENTIST - SQUARE

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Adam Beck

CO-FOUNDER AND CHIEF OF ENGINEERING - FINGOAL

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