Logan Cooper

Portfolio: logan-cooper.com Github: github.com/ldtcooper LinkedIn: linkedin.com/in/ldtcooper/

### Career Profile

I am a data scientist with over five years of experience in data science, software engineering, and data engineering. At EBP Consulting, I produced machine learning products and economic models using R, Python, and SQL, which generated over one million dollars in revenue. I have professional experience with Python, R, SQL, JavaScript, and Java. I hold a M.S. in Economics and Computer Science from Duke University.

#### EXPERIENCE

EBP US Data Scientist New York, NY

Jul 2023 - Dec 2024

Email: LDTCoop@gmail.com

Phone: (323) 698-6487

- Evaluated machine learning models in Python (pandas, scikit-learn, statsmodels) for regression and classification tasks to synthesize data for use in a policy simulation project used by several East Coast states on a contract worth
- Utilized R and Arrow to build data pipelines and regression models on 100+ GB datasets to predict economic impacts of changes to vehicle taxation in California on a contract worth over \$115,000.
- Translated economic models from Excel to MySQL and integrated them into our economic impact forecasting software so they could be used for transit planning in the state of Michigan on a contract worth over \$500,000.

**Duke University** 

Data Scientist/Research Assistant

Feb 2022 - May 2022, Sep 2022 - May 2023

- o Developed a unique research dataset utilizing Python and JavaScript scraper, amassing 80GB of broadcast news transcripts into a SQL (Postgres) database.
- o Implemented BERT-based topic modeling keyword extraction algorithms to identify relevant news articles related to crime and criminal justice, saving dozens of hours of manual checking.

Pearson Durham, NC

Data Science Intern

May 2022 - Aug 2022

- o Constructed data pipelines utilizing Python, pandas, and SQL, facilitating the download, cleansing, and transcription of 11.5 million text, audio, and video documents, loaded into Google BigQuery for NLP training.
- o Developed a prototype AI search and recommendation engine, leveraging textbook data to better recommend learning resources to customers, including a Flask API and React frontend.

# Federal Reserve Bank of San Francisco

San Francisco, CA

Software Developer

Jul 2020 - Jul 2021

o Developed a custom Java ETL tool: automating data conversion, ensuring data quality, and providing automated and timely access to data for over 200 economists and data scientists across all 12 branch banks.

San Francisco, CA

Software Developer

Jan 2018 - Jun 2020

- o Developed React/Redux frontends and Node (Express) backends for educational simulations and data visualizations as part of an agile, cross functional team, resulting in over \$990,000 in revenue.
- o Devised an internal JavaScript CLI tool, significantly reducing developer time per project and enhancing compliance with internal coding standards and saving between 8-16 hours per project.

## EDUCATION

**Duke University** 

Durham, NC

M.S. Economics and Computer Science

2021 - 2023

Selected Coursework: Machine Learning, Natural Language Processing, Databases, Topics in Data Science, Mathematical Statistics

U.C. Santa Cruz

Santa Cruz, CA 2012 - 2016

B.A. Global Economics (cum laude)

#### SKILLS

• Languages: Python (PyTorch, Flask, matplotlib, scikit-learn), SQL (Postgres, MySQL), JavaScript (React, Node)

• Tools: Git, Amazon Web Services (AWS), Google Cloud Platform(GCP), Tableau, Excel, Docker

#### Projects

• Modle: The ML Guessing Game: Game where users are shown a decision boundary generated by one of several machine learning algorithms (e.g. logistic regression, boosted decision trees, SVM, neural network) and must guess which one was used. Approximately 500 users per year. Tech: Python, Flask, scikit-learn, pandas, TypeScript, React, MaterialUI, PostgreSQL, Docker