

# Logan Cooper

Portfolio: [logan-cooper.com](https://logan-cooper.com)

Github: [github.com/ldtcooper](https://github.com/ldtcooper)

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## SKILLS

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- **Languages:** Python, SQL, R, JavaScript
- **Frameworks:** Pandas, scikit-learn, numpy, scipy, PyTorch, spacy, Flask, tidyverse, React, D3.js, Node
- **Tools:** Git, Amazon Web Services (AWS), Google Cloud Platform(GCP), Tableau, Excel

## EXPERIENCE

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- **EBP US** New York, NY  
*Data Analyst* *July 2023 – Present*
  - Utilized R and Arrow to build data cleaning and machine learning pipelines 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.
  - Evaluated linear, tree-based, and boosted models in Python (scikit-learn) for generating synthetic household vehicle preferences for use in a policy simulation project used by several East Coast states on a contract worth \$130,000.
- **Duke University** Durham, NC  
*Graduate Research Assistant* *Feb 2022 – May 2022, Sep 2022 – May 2023*
  - Developed a unique research dataset utilizing Python and JavaScript scraper, amassing 80GB of broadcast news transcripts into a PostgreSQL database.
- **Pearson** Durham, NC  
*Data Science Intern* *May 2022 - Aug 2022*
  - Constructed data pipelines utilizing Python, pandas, and SQL, facilitating the download, cleansing, transcription, and data modelling of 11.5 million assorted media documents, subsequently stored in Google BigQuery for NLP training.
  - Prototyped an NLP-based 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*
  - Developed a custom Java ETL tool, automating data conversion and QA processes and saving hours of business analyst and managerial time.
- **Forio** San Francisco, CA  
*Software Developer* *Jan 2018 - Jun 2020*
  - Developed React/Redux frontends and Node (Express) backends for nine educational simulations, resulting in over \$990,000 in revenue for clients, including a public health policy simulation tool for the CDC.
  - Devised an internal Node CLI tool, significantly reducing developer time per project and enhancing compliance with internal coding standards and saving between 8-16 hours per project.

## EDUCATION

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- **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  
*B.A. Global Economics (cum laude)* *2012 - 2016*

## PROJECTS

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- **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. Tech: Python, Flask, scikit-learn, pandas, TypeScript, React, PostgreSQL
- **Linear Regression API:** API which can perform and visualize simple OLS linear regressions. Tech: Python, Flask, JavaScript, D3.js, AWS Lambda