Colin FitzGerald

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EDUCATION

University of California, Berkeley

August 2018 - May 2022

Bachelor of Arts in Economics, Minor in Data Science

Berkeley, CA

- Coursework: Computational Structures in Data Science, Principles of Data Science, Linear Algebra and Differential Equations, Probability and Mathematical Statistics in Data Science, Econometrics.
- Extracurricular: Track and Field Student-Athlete. Team Captain, leading group through PAC-12 Championships while dedicated to a strict 25+ hours/week training regime and balancing a full course load.

Technical Skills

Programming Languages: Python, JavaScript/TypeScript, SQL Web Development: React, Next.js, HTML/CSS, Tanstack, MUI Backend Technologies: Node.js, FastAPI, SQLAlchemy

Databases: PostgreSQL, MySQL, NoSQL

DevOps & Cloud: Kubernetes, Docker, Terraform, GitHub Actions, CI/CD, Git, GCP, AWS

Analytics & Tools: Mixpanel, Postman

Experience

Commure

Mountain View, CA

Software Engineer, EMR Team

January 2024 - Present

- Identified and resolved **company-wide** memory bug, saving thousands in cloud spend per year in addition to speeding container cold starts from 4+ minutes to less than 10 seconds.
- Rebuilt native EMR Scribe backend from scratch, advocating for the switch from multi-threading to asynchronous I/O, reducing note processing time by over 300%.
- Core engineer on EMR product from day 1, ensuring product quality while scaling from initial launch to \$10mm+ in ARR.

RoBhat Labs (Acquired by Commure)

Berkeley, CA

 $Full ext{-}Stack\ Engineer$

June 2022 - January 2024

- Analyzed key product metrics with Mixpanel, leveraging reports to analyze customer use-trends and facilitate datadriven product improvement.
- \bullet Designed and developed content-ranking infrastructure, driving a 7% increase in D1 retention and 5x increase in aggregate notification engagement.
- Implemented a semantic search application for operators; Reduced manual labor by 25% and prepped application for future scalability.
- Managed the performance of a team of 10 operators, ensuring content quality, accountability, and holding weekly
 check-in meetings to monitor and assess operator progress.

CoreVest Finance Irvine, CA

Data Science Intern

May 2021 - August 2021

- Architected an **ETL** pipeline to extract inputs from 1k+ PDF loan applications through an **OCR** API and Python **Regex** scripts in a structured data format, simplifying loan application data processing.
- Proposed and led a team of interns in building a random forest model from the data pipeline.
- Using bootstrapping techniques, the accuracy of the initial model improved from the baseline 67% to 99.7% deliverable for production as a copilot for loan underwriters, reducing manual labor by 20%.
- Leveraged data analytics skills to build holistic customer personas for the marketing team, leading to a 3x increase in the effectiveness of the ad campaign.

Projects

AI Chatbot AI Chatbot

- Built an AI chat-bot integrated with multiple LLM providers, supporting that streaming and saving thats
- Deployed server on bare metal in US-West, in addition to using ScyllaDB for extremely low latency database operations (less than 50ms)