THOMAS YEOH

+1 (669)-799-7334 | tyeoh@berkeley.edu | https://tyeoh9.github.io/tyeoh/

Education

University of California, Irvine

Master of Computer Science

University of California, Berkeley

B.S. Electrical Engineering and Computer Science

- <u>Coursework</u>: Data Structures, Algorithms, Computer Architecture, Optimization models, Discrete Mathematics, Probability Theory, Computer Vision, Computer Graphics, Machine Learning, Databases
- <u>Activities & Awards</u>: Cal Leadership Scholarship, Google Developers Club (VP of Strategy)

Skills

Languages: Python, Java, C++, HTML, CSS, JavaScript, SQL, R, Bash, Assembly, Scheme

Technologies: Linux, GCP, PyTorch, Pandas, NumPy, Git, Flask, React, Node.js, Streamlit, Docker, Jupyter

Experiences

Zoofi AI Sunnyvale, CA

Software Engineer Intern

June 2025 – Present

Expected: Dec 2026

Graduated: May 2025

- Designed a multi-agent pipeline, leveraging Google ADK to automate document parsing and data extraction.
- Built and tested FastAPI endpoints for client CRUD operations with Firestore integration and Firebase auth.
- Participated in daily Scrum standups and weekly sprint demos, collaborating via Jira to track progress.

Berkeley Operations & Behavioral Analytics Lab

Berkeley, CA

Research Assistant

Jan 2024 – May 2025

- Performed data analysis and manipulation using Pandas and NumPy on datasets to support empirical findings.
- Translated mathematical models into code, optimized the data pipeline, and sped up pre-computation by 44%.
- Actively involved in using HPC cluster computers, creating tutorials, and adding documentation for lab members.

Keysight Technologies

Penang, Malaysia

Software Engineer Intern

May 2024 – August 2024

- Deployed and developed a text classification app for service orders with React, reducing analysis time by 25%.
- Built an end-to-end data pipeline with REST API and Flask to efficiently process over 120,000 data points daily.
- Utilized various libraries (Keras, Sklearn, Seaborn) for advanced data modeling and analysis on large datasets.
- Experimented with ML methods: XGBoost, SVM, K-means, logistic regression, and Facebook fastText.

Projects

RookieDB (Java, SQL)

- Implemented a SQLite-like (RDBMS) database using policies such as multi-granularity locking and ARIES recovery.
- Utilized data structures like B+ tree indices and join algorithms for efficient query execution.

Live Traffic Monitor (GCP, Docker, Streamlit)

- Deployed a web app via GCP Run and Docker to fetch snapshots of live traffic and store them in Cloud Storage.
- Analyzed and displayed congestion levels on a Streamlit app via OpenAI's vision API.

Image Denoising with U-Net and Diffusion Models (Python, PyTorch)

- Developed and trained a U-Net for single-step image denoising on noisy datasets.
- Implemented diffusion-based iterative denoising for enhanced noise removal in high-noise images.
- Visualized model performance across training epochs, including varying noise levels for quality analysis.