THOMAS YEOH

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

Education

University of California, Berkeley Graduating: 2026

B.S. Electrical Engineering and Computer Science

- Coursework: Data Structures, Efficient Algorithms, Computer Architecture, Optimization models, Discrete Mathematics, Probability Theory, Computer Vision and Computational Photography

Experiences

UC Berkeley, Haas School of Business Berkeley, CA

Research Assistant Jan 2024 – Present

- Translated mathematical models into code, optimized code, and sped up pre-computation by 44%.
- Analyzed and processed 1.18+ million data points to understand team formation dynamics and worker efficiency.
- Explored diverse GAN and CNN models, simulating human decision-making of rideshare drivers.
- Actively involved in using HPC cluster computers, creating tutorials, and adding documentation for lab members.

Keysight Technologies Penang, Malaysia

R&D Software Engineer Intern May 2024 – August 2024

- Developed and deployed a text classification app for service orders with React, and 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.
- Migrated back end to Microsoft Sharepoint and implemented robust logging for debugging and data reliability.
- Utilized Sklearn for advanced data modeling and analysis on large datasets, optimizing processing speeds by 36.4% for more responsive data-driven insights.

DegreeCat Remote

Software Developer Aug 2023 – Nov 2023

- Implemented front-end technologies (HTML, CSS, JavaScript) for optimal cross-device visual experience.
- Participated in the full development lifecycle, iterating rapidly to refine features and improve user experience.
- Picked up new technologies quickly and wrote clean, scalable, and well-documented code, contributing to a 15% reduction in onboarding time for new developers.

Projects

College Hub (Kotlin)

- Built a mobile app with Kotlin and Jetpack Compose to enhance student communication and resource access.
- Led the development of core features, including the user dashboard and professor ratings.

Word Usage History (Java)

- Replicated Google's Ngram Viewer using HashMaps and graphs for efficient handling of datasets up to 300 MB.
- Leveraged custom data structures and tree algorithms to retrieve information in under 50 ms for 95% of queries.
- Utilized test-driven development and extensive unit testing.

Image Recolorization & Blending (Python)

- Employed image processing techniques like Gaussian pyramids to align image channels to recolor images.
- Implemented convolutions and Laplacian stacks to blend any two images seamlessly - used frequency domain.

Skills

Python, Java, C++, React, Node.js, HTML, CSS, JavaScript, Kotlin, Linux, TensorFlow, Pandas, Sklearn, SQL, R, x86