Tyler Hou

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https://github.com/tylerhou
https://linkedin.com/in/tylerhou

Skills

Fluent

languages	C++, {Type,Java}Script, Golang, Python
technologies	Bazel, React, Git, Linux

Have Experience

Java, Ruby

PostgreSQL, Ruby on Rails, Node, LaTeX, Nix, Webpack

Work Experience

10/2018–now
~3 years

Software Engineer, *Google LLC*, Sunnyvale, CA.
- Designed and developed a benchmarking automation tool & data processing pipeline.
- Worked on a performance simulator that analyzes how processor microarchitecture affects Google Search.
- Overhauled an internal website which consisted of uncompiled, untested JavaScript that tracked Search feature performance. Before adding new features, I migrated it to React + TypeScript and set up a build & deploy system to improve developer velocity, all while writing unit & integration tests (96% coverage).
- Automated CPU frequency scaling experiments to evaluate performance of current and future platforms.

9/2017–9/2018
1 year

Software Development Engineer, *Eden (YC S15)*, San Francisco, CA.
- Wrote libraries and tooling that empowered developers to rapidly build fully-featured client side forms in React and seamless, type-safe GraphQL mutation endpoints for Rails.
- Designed a financial system to accurately track transactions, transaction amendments, invoices, and payments on Eden's marketplace platform.
- Designed the front-end architecture for a chat application for Eden's partners, customers, and account managers (after seven months, it had fewer than three bugs in production).

Education

University of California, Berkeley

2021–now

Undergraduate, *College of Letters and Science*, undeclared.

CS	CS 61A, CS 170 (Efficient Algorithms and Intractable Problems)
math	Math 1A (Calculus)

Phillips Exeter Academy

2013–2017

Classical Diploma, *Phillips Exeter Academy*, cum laude.

CS	Data Structures and Algorithms, Databases and Independent Study
math	Calculus I, Calculus II, Linear Algebra, Real Analysis, Topology

Projects

2021

Fiber, https://github.com/tylerhou/fiber.
A proof-of-concept Python decorator that transforms recursive functions so that they can recurse arbitrarily deeply without stack overflowing using a trampoline that simulates the call stack on the heap.
HN Discussion: https://news.ycombinator.com/item?id=29628772

Other

interests	fluent in Classical Latin; knows basic Ancient Greek; not-yet published poet and translator of questionable skill; a cappella and choir singer; Classical archæologist (Mt. Lykaion).