Tyler Hou

✉ tyler.hou.cs@gmail.com
https://github.com/tylerhou

Education

2013–2017 **Classical Diploma**, *Phillips Exeter Academy*, Class of 2017, cum laude.

Skills

	Fluent	Have Experience
languages	TypeScript, JavaScript (ES6), Python, Ruby, C++	C, Java
technologies	Linux, React, Ruby on Rails, Git, PostgreSQL	Webpack, Node, LaTeX

Work Experience

10/2018-now **Software Engineer**, *Google LLC*, Sunnyvale, CA.

9/2017–9/2018 **Software Development Engineer**, *Eden (YC S15)*, San Francisco, CA.

- Wrote libraries and tooling which used type hinting to empower developers to rapidly build fully-featured client side forms in React and seamless, type-safe GraphQL mutation endpoints for Rails. These tools reduced boilerplate by 80% and saved hours of developer time per form or mutation.
- Designed a financial system to accurately track transactions, transaction amendments, invoices, and payments between partners and customers on Eden's marketplace platform, saving our finance and success teams 50+ hours per week.
- Designed the front-end architecture for a chat application for Eden's partners, customers, and account managers (after seven months, it has had less than three bugs in production).

2014–2017 **Freelance Software Engineer**, *Phillips Exeter Academy*, Exeter, NH.

- Designed a new website for the Exeter Math Club with React, webapp2, and Google App Engine. `https://exeter-math.appspot.com/`
- Integrated with an online credit card payment provider for the Exonian Online newspaper.
- Managed DNS and hosting for the website of Matter Magazine, an Exeter science publication.
- Created a visualization of the k-means algorithm for teaching students at Exeter Computing Club. `https://github.com/tylerhou/kmeans`

Relevant Coursework

Phillips Exeter Academy

computer science **CSC420: Data Structures and Algorithms** (grade: A)
CSC999: Databases and Independent Study (grade: A)

mathematics **Calculus I, II** (grade average: A), **Linear Algebra** (grade: A), **Real Analysis** (grade: A-), **Topology** (A-)

Online Courseware

computer science Coursera: Andrew Ng's Stanford University **Machine Learning** (100% completed)
`https://www.coursera.org/account/accomplishments/certificate/7XHNAP2HGLTL`

Projects

2015 **Connect Four**, `https://github.com/tylerhou/connectfour`.
A connect four game GUI and AI for the CSC420 course in Java, built with negamax (a variant of minimax) plus alpha-beta pruning and a responsive, threaded UI.

2015 **Flow**, `https://github.com/tylerhou/flow`.
A physics simulation of circles undergoing perfectly elastic collisions in CoffeeScript.

Other

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