

ALYSSA WANG

References available upon request.

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<https://github.com/AlyssaWang>

<https://alyssawang.github.io/>

EXPERIENCE

MITRE Corporation, Software Engineer — *React, Material UI, Vue, TensorFlow, Power BI* Aug 2020 - present

- Developed **Power BI data visualizations for COVID-19 plasma donation** outreach efforts. 26,000+ lives were saved; hundreds of thousands of plasma donations were facilitated. Won major internal awards.
- Led design work and improved workflows on an open source **FHIR testing app built with React and Ruby**.
- Developed **React dashboards to enable microservice integration** via REST APIs. Won major internal awards.
- Created a **React database search engine** to support pediatric oncology data sharing. Won internal awards.
- Developed key frontend features on a **Vue and D3.js data visualization** app leveraging novel data sources.
- Built **machine learning models** to minimize the novice-expert learning gap. Results spawned a MIP proposal.
- Served as **social chair**: collaboratively planned interdepartmental social events and managed the social budget.

Williams College, Prof. Iris Howley, Research Assistant — *TypeScript, Angular, Firestore* Sep 2019 - June 2020

- Prototyped a web app to analyze **Bayesian Knowledge Tracing** as an effective method for evaluating learning.
- Users can create quizzes and view a BKT results dashboard indicating level of learning achieved after submission.

Google, Angular, Intern — *TypeScript, Angular, Github API, NgRx, RxJS* June 2019 - Sep 2019

- Implemented filters, optimized data retrieval/storage, and added UI updates to the **Caretaker Dashboard**.
- Provided advanced functionality for the Caretaker (internal); streamlined the Caretaking process on Angular.

Google, Local Search UI, Intern — *JavaScript, React, JSLayouts, protocol buffers* May 2018 - Aug 2018

- Introduced **user moderation voting** and pending edit interaction to desktop Google Local Search.
- Increased rates of location edit approval; provides feedback to users. Resulted in 37,000+ additional votes/week.

EDUCATION

Williams College, B. A. — *Computer Science, Comparative Literature* Sep 2016 - June 2020

- CS Class of '60s Scholar • Chinese-American Organization Co-chair • Underrepresented Identities in CS

Oxford University, Williams-Exeter Programme at Oxford Sep 2018 - June 2019

- Oxford Women in CS • Oxford Women in Science and Technology • Turl Street Homeless Action

SKILLS AND INVOLVEMENT

Programming Languages: TypeScript, JavaScript, HTML/CSS, Python, Java, Swift, Kusto/SQL, R

Technologies: Git, React, Angular, Vue, Material UI, Firestore, D3.js, Power BI, Azure Databases, Agile Planning

Languages: English (Fluent), Spanish (Proficient), Mandarin (Limited Proficiency)

Awards: Generation Google/Google CSSI, Anita B.org Scholar, NCWIT Aspirations in Computing

Hackathons: Creatica, GraceHacks, Spectra 4.0 (**Mentor**) • OxfordHacks (**Staff**) • EphHacks (**Best Execution**) •

HackRPI (**Funniest Hack**) • Hack Cambridge, HackNY, HackHarvard, HackGT, Hack the North (**Participant**)

Diversity and Inclusion in STEM: NCWIT Aspirations Application Reviewer, Hackathon Mentor, Intern Mentor

SELECTED PROJECTS

Gridiron Gauntlet – *Game Design, Gesture Recognition, Collision Detection*

- Single-player iOS clone of *Gridiron Gauntlet*. The player must avoid colliding with enemies for as long as possible.
- **Technologies:** Swift/Xcode, SpriteKit, UIKit, GameplayKit, CoreGraphics

PIN? – *User Experience, Design, User Testing*

- Design project. Encourages users to be curious via location-based information crowdsourcing.
- **Technologies:** Balsamiq, Markdown, Git, contextual inquiry, paper and digital prototypes, user testing