# JARED TAN

# SF | Software Engineer | 949-275-7566 | jared.e.tan@gmail.com [ JaredTan | in jared-e-tan | www.jaredtan.tech

## Skills

**Software / Technologies**: JavaScript, Ruby, Ruby on Rails, React.js, React Native, Redux, SQL (PostgreSQL), Node.js, MongoDB, Express.js, jQuery, HTML5, CSS3, Git, CLI

Biotechnology: Enzyme Formulations, Analytical Chemistry, Molecular Biology, Protein Engineering

## **Projects**

### Woven

 $\textit{React Native iOS} \mid \textit{Redux} \mid \textit{MongoDB} \mid \textit{Express.js} \mid \textit{Node.js}$ 

iOS mobile app allowing two users to share a private digital space with instant messaging, activity planning, interactive games, and more. (Aug 2017 - Present)

http://woven-app.com | https://github.com/JaredTan/Woven

- Orchestrated the application's architecture as lead developer among 5 engineers, resulting in smooth collaboration and deployment of a working mobile application within a week.
- Established instant messaging with bi-directional data flow using web sockets and Node.js non-blocking I/O.
- Adapted efficient and pragmatic Git feature branch workflow.

### **Pinned**

Ruby on Rails | React | Redux | PostgreSQL

Web app inspired by Pinterest allowing users to explore and share creative ideas with the world via pins and boards. (June 2017 - Present)

http://pinned.life | https://github.com/JaredTan/Pinned

- Integrated cloud-based image hosting using Cloudinary API for user image uploading and storage.
- Designed search engine using PostgreSearch displaying pins, boards, and users based on user input.
- Implemented Masonry layout grids to optimize boards and pins based on available browser space for an elegant UI.

Colored Diffusion JavaScript

2D visualization of colored droplet molecules in water. (July 2017) http://www.coloreddiffusion.com/ | https://github.com/JaredTan/ColoredDiffusion

- Applied color blending of molecules using vanilla JavaScript resulting in an eye-catching molecular simulation.
- Emulated particle physics and momentum conservation for an educational display of entropy in nature.

# Work Experience

### **DUPONT | PALO ALTO, CA | 2015-2016**

#### FORMULATIONS INTERN / RESEARCH ASSISTANT

- Valorized and filed patent for a Tide detergent enzyme recipe leading to a ~40% raw cost reduction.
- Self-initiated a collaborative project with another team resulting in a symbiosis of technologies.

### JOINT BIOENERGY INSTITUTE | EMERYVILLE, CA | 2013-2015 UNDERGRADUATE RESEARCH ASSISTANT

- Co-authored publication for recycling in ethanol biofuel production in BioEnergy Research.
- Designed a technique for biomass pretreatment resulting in a ~99% sugar yield from raw biomass for biofuels.

### UC BERKELEY COLLEGE OF CHEMISTRY INSTRUCTIONAL SUPPORT FACILITY | 2013-2014

Supervised and instructed 45+ sections of 25 students for Chemistry 1AL and Chemistry 1B.

### Education

University of California, Berkeley - B.S. Chemical Biology, Bioengineering Minor | 2012 - 2016