

# JARED TAN

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 JaredTan |  jared-e-tan |  [jaredtan.tech](mailto: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

*React Native iOS | Redux | MongoDB | Express.js | 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)

<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.
- Initiated a collaborative project with another team resulting in a symbiosis of related ideas and 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