1700 Botelho Dr, Apt 229
Walnut Creek, CA 94596

# GRANT REED

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GrantDReed.github.io

## EXPERIENCE

**Co-creator / Software Engineer**          **Ouroboros**

In-browser, reflex-based p2p Snake game built with Node, React, Redux, and WebRTC
- Implemented a Conflict-free Replicated Data Type (CRDT) to ensure eventual consistency of game state across peers
- Devised predictive algorithms to improve user experience
- Optimized collision checking and display rendering
- Implemented data buffers to ensure accurate winner determination and smooth end-of-game transition for all peers
- Achieved lowest possible latency via a full-mesh network topology
- One of two engineers on project
- **Website**: https://ouroboros-game.herokuapp.com/about

**Personal projects**
- Reaction: A Trello-like project management tool
  - Rails + Webpack + React/Redux + Heroku (https://reaction-trello-clone.herokuapp.com)

- postit: Reddit-like blog app
  - Rails + JQuery + SASS (https://github.com/GrantDReed/postit)

- TodosTracker: Clean and simple task management tool
  - Sinatra + Postgres + Sequel ORM (https://github.com/GrantDReed/todos-tracker-sequel)

## EDUCATION

**Davis, CA**                    **University of California**                    **2011 - 2014**
- B.S. in Evolution, Ecology, and Biodiversity

**Launch School**                                                        **2016 - 2018**
- Full-stack web development curriculum

## SKILLS

- Javascript, Ruby, PHP, Python, SQL, HTML, CSS
- React, Redux, Node, Ruby-on-Rails, jQuery, Git/Github, WebRTC, CSS preprocessors
- Data structures and algorithms, distributed systems, schema design, OOP, REST

## PREVIOUS EMPLOYMENT

**Lab Technician II**          **California Seed and Plant Labs**          **August 2014 - August 2015**
Seed Health Lab
- Increased processing volume by repurposing unused office space, carried out QA experiments, improved workflow via new filing system, and promoted to Lab Technician II after 3 months.

**Lead Field Technician**          **University of Toronto Mississauga**          **May 2013 - August 2014**
McCauley Lab
- Built temperature-controlled aquaculture tanks, and promoted to Lead Technician after first season