# Nader Arbabian

Software Engineer

#### Projects

## RobinUblind (Rails, PostgreSQL, JavaScript, React, HTML5, CSS)

A fully featured Robinhood-inspired web app where users can purchase or follow stocks, and view their portfolio performance calculated using real-time data.

- Leveraged database indexing and batch API requests in the backend to calculate daily portfolio value using basic transaction data without storing any information in the database, resulting in fast and accurate data without taking up any extra storage.
- Deployed authentication pattern using password digests and session tokens, creating a secure authentication system that protects user data in the event of a security breach.
- Designed React component using OOP principles in order to create modular components, allowing for fast debugging, feature implementation, and DRY code.
- Employed JBuilder to normalize backend data output and create RESTful responses, allowing for fast scaling and addition of new features.

#### SuicideBurn (JavaScript, HTML5)

A simple JavaScript game inspired by Lunar Lander created following OOP principles.

- Designed and deployed a realistic and modifiable physics engine without using any external libraries.
- Designed a tweakable algorithm that randomly generates a Moon surface.
- Implemented collision detection algorithms that can detect collisions using only vertices data.
- Leverage Google Firebase to create a serverless data retention system for high scores.
- Designed and implemented realistic and accurate trajectory prediction algorithms .

#### Trails+RecordKeeper(Ruby)

A simple Rails and Activerecord-inspired backend framework and SQLite3 ORM.

- Created a deployable and expandable model-view-controller server using puma and Rack
- Created dynamic ORM model classes leveraging ruby metaprogramming and SQLite3.
- Leveraged Rack to enable session tracking and flashing using cookies.
- Utilized Rack middleware to enable serving static assets.

### Languages and Frameworks

JavaScript, Ruby, Ruby on Rails, React + Redux, JQuery, HTML, CSS3, SQL, Git, TDD, Bash, RSpec

#### **Education**

App Academy · Nov. 2018 - Feb. 2019
Web development course teaching Rails and React.js
with a 3% acceptance rate, with Topics including: TDD,
scalability, algorithms, OOP, coding style, REST.
Security, single-page apps, and web development best
practices

University of California, Santa Barbara · Sept. 2017 B.S. Aquatic Biology

Relevant coursework: statistical analysis of field data, physics of ocean currents, constructing ecological models using MATLAB

## Employment

### Infigo

Lead Technician- Assistant Manager Orange County, Ca Jan. 2018 - Aug. 2018

- Leveraged problem-solving skills to repair any component level hardware and software issue encountered, with 90%+ success rate in all repairs.
- Became a store assistant manager within two months of hiring, maintaining high quality of service with little supervision, allowing company to expand operations into new stores, doubling company revenue
- Trained and supported entry level technicians in both software and hardware repairs, providing both inperson and off-site support as needed. Developed diagnostics and repair procedures for new issues as they were identified.