

# Ryan Louie

(408) 489-0407 | ryanlouie95@gmail.com | ryanxlouie.github.io | linkedin.com/in/ryanylouie

## EDUCATION & SKILLS

**University of Southern California**

May 2017

**Bachelor of Science Electrical Engineering, Emphasis in Computer Engineering**

Major GPA: 3.6/4.0

### Technical Skills and Qualifications

Strong: JavaScript (React, Node.js, Express, Vue, Webpack, Jest, Enzyme), MongoDB, Gitlab CI/CD

Experienced: Redux, Python, MySQL, PHP, HTML/CSS, Nginx

Security Clearance: Top Secret

## EXPERIENCE

**Northrop Grumman – Government Defense Contractor**

Jul 2017 – Current

### Full Stack Software Engineer II

- Designed, built, and launched internal project management platform in collaboration with VP's in Product and Engineering teams, ease of use and accuracy allowed 3 deployment teams to complete milestones ahead of time
  - Spearheaded beta migration of application onto AWS to leverage increased storage and processing capability
  - Built in accessibility for other internal applications by expanding on back-end API compatibility
  - Preserved aesthetics across deployments by developing a front-end component library npm package
  - Reduced deployment time by 75% by utilizing Gitlabs CI/CD pipeline
- Developed API's for satellite photo classification tool in collaboration with cross functional engineering teams
- Built GUI for product development tool that streamlined component compatibility checks across multiple teams
- Created visual tool to advise project management team on optimal costs and capabilities in product proposals
- Mentored direct report and junior software engineers to ensure consistent service for internal business partners

### Electrical Engineer I

- Created a change request application to replace existing legacy software that manages satellite command changes
- Automated satellite subsystem end to end circuit tests using Python, saving 100+ hours over the span of 3 months
- Supported satellite team in maintenance and analysis of command and telemetry data within structured database
- Revised over 250 electrical design diagrams to aid in acceleration of satellite hardware testing

**Department of Defense – US Army Medical Research Institute of Infectious Diseases**

Jun 2016 – Aug 2016

### Software Development Intern

- Automated data cleaning, manipulation, and analysis of pathogen activity and development across multiple studies
- Designed interactive Python GUIs for ease of data entry in human metabolomics research

## PROJECTS & LEADERSHIP

**Equity Trading Strategy Development**

Aug 2018 – Current

- Created a web application to simulate the effect of various technical indicator-based dollar cost averaging strategies in order to develop long term investment algorithms which would optimize overall return on investment
- Developed a variety of algorithms that utilize technical analysis to identify short term trading strategies, realized 20% return on \$10,000 within a 3-month time frame

**Alpha Phi Omega - Professional Service Fraternity**

Feb 2014 – May 2017

### President

- Implemented various incentive programs and metrics to cultivate member retention and development
- Maintained website and updated various features to increase accountability for the club's 100+ members
- Volunteered 60+ hours mentoring children at Jordan Downs Housing Project in Watts

**Interests:** Volleyball, Technical Stock Analysis, Volunteer Coaching/Mentoring