# **JACK YANG**

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### **EDUCATION**

# Berkeley, CA University of California, Berkeley

Fall 2015 - Present

- Bachelors in Computer Science, Intended Graduation: May 2018
- · GPA: 3.95
- Technical Coursework: Structure and Interpretation of Programs; Multivariable Calculus; Data Structures; Linear Algebra and Differential Equations; Discrete Math and Probability Theory; Algorithms; Machine Structures; Artificial Intelligence

# **TECHNICAL EXPERIENCE**

# **Software Engineer, Intern**

# NASA Jet Propulsion Laboratory, Pasadena, CA

Jun 2016 - August 2016

- Worked within the Mission Planning Division to create software tools necessary to plan the the flight path and mission sequencing of the Europa Mission (Launching in 2022)
- Constructed a pipeline to unify the mission planning process. This resulted in the complete automation of the software involved in planning, from the simulation runs to post simulation analysis. Mission planners can now see potential drawbacks and benefits resulting from their adjustments to the flight trajectory with relative ease.
- Integrated mission timeline viewing software with 3D mission visualization software on a web client to create an immersive experience for mission planners. This prototype allows upper management to see the future of mission planning software and is a bid for additional funding for the group.

# **Software Engineer**

# Automotor Tool Rental, Issaquah, WA

June 2016 - Present

- Helping design an e-commerce site that combines the used hardware purchase and rental business. Website
  dynamically adjusts the prices of used tools depending on how often the tools were rented in the past. Accesses a
  database to check how often a tool had been rented and lowers the purchase price of the used tool for the
  consumer while still maintaining profitability for the company (when accounting for rental profits).
- · Created enterprise asset management tools to keep track of inventory

#### **Lab Assistant**

#### University of California, Berkeley, CA

Jan 2016 - May 2016

- Course: Structure and Interpretation of Computer Programs
- Helped lead and provide technical help to a lab section in the largest CS course in the country

### **PROJECTS**

SmartTabs 2016

• Wrote a tab manager service while at TreeHacks 2016. I designed the chrome extension to calculate which tabs are not being used to help de-clutter the browser. Javascript

Instafriends 2015

- Accesses the Instagram API to view various metrics of an Instagram profile. I Implemented an algorithm leveraging this data to rank how close someone is to their followers.
- I wrote the backend of the site in Python and used the Flask framework along with an Apache server to host it. All of this communicates with a database so users can search through their followers and see who their closest followers are as well.

Jacksbeats 2014

 Music sharing website that uses the Youtube API to retrieve songs searched by users. Created social features such as profiles, feeds, and a clipping feature to allow users to share their favorite clips. Over 10,000 searches have been made on the site. Javascript; PHP; MySQL

### **ADDITIONAL EXPERIENCE AND AWARDS**

UC Berkeley Honors to Date 2015 – 2016	
Skyline High School Valedictorian 2015	
International Baccalaureate Diploma 2015	
DiscNW Ultimate Frisbee HW Co-ed Champions 2014	

### **LANGUAGES AND TECHNOLOGIES**

- Python; Java; JavaScript; C; C++; Scheme; SQL; PHP; HTML; CSS
- \*nix; Git; Flask; Node.js; Jenkins; ReactJS