RACHEL S. CHEN

FULL-STACK DEVELOPER

CONTACT

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SUMMARY

My love for gaming, robotics, and the internet led me to coding, and my engineering background has trained my attention to detail, aversion to error, and emphasis on human-oriented design. I enjoy technical challenges and welcome any tossed my way.

SKILLS

PROGRAMMING LANGUAGES: JavaScript, Python, HTML5, CSS
ENVIRONMENTS AND FRAMEWORKS: Node.js, Express.js, ReactJS, AngularJS, Django, A-Frame
LIBRARIES: jQuery, Pandas
DATABASES: PostgreSQL, MongoDB

EDUCATION

GENERAL ASSEMBLY, SEATTLE
Web Development Immersive 2017
Data Science Part-Time 2016

UNIVERSITY OF CALIFORNIA, SANTA BARBARA (UCSB)
Bachelor of Science Mechanical Engineering 2011
Elective emphasis on robotics algorithms and structures.

PROJECTS

GUBE ROLDBERG — Feb 2016

Developed a Rube Goldberg sandbox site where users can choose from provided assets to create their own Rube Goldberg-esque machines and allow others to play around with them. Physics engine is provided by Matter.js.

8-BIT CHAT — Jan 2017 to Feb 2017

Developed a virtual chat room MEAN-stack app styled with 8-bit aesthetics as a three-person five-day collaboration. Socket.io enables live connection among users, and HTML5 Canvas displays every connected user's avatars and speech bubbles.

DUCKFACE — Jan 2017

Developed an image manipulation and gallery site that auto-superimposes duck beaks over faces detected in uploaded photos. The Face++ API was used to detect faces and provide detailed data to allow client-side positioning, angling, and scaling of duck beaks for each face analyzed.

LASER EYE BEAM SIMULATOR — Dec 2016

Developed a browser-based mobile VR first-person shooter game built off open source HTML framework A-Frame and JavaScript over the course of a week. Users can use a Google Cardboard or any mobile VR peripheral to enhance the experience on their phones (can be played without additional peripherals) as they aim their cursors at incoming block targets to eliminate them for points.

EMPLOYMENT

BOEING COMMERCIAL AIRPLANES (BCA) — Long Beach, CA

Structural Analysis Engineer Level 2 for Interiors Stress — Jul 2011 to Aug 2014

Analyzed structural integrity of multiple airplane interior commodities onboard Boeing model series 757, 767, 777, and 787 per FAA regulations:

- Analyzed interior ceiling assemblies for 757, strongback assemblies for 777, and fairings for 787.
- Investigated in-service failures of fittings on 767s and assembly line errors on 787s.
- Developed new interior fairing designs onboard Dreamliner models 787-8 and 787-9 for various airline customers.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA — Santa Barbara, CA

Lab Teaching Assistant for ME 10: Engineering Graphics — Mar 2011 to Jun 2011

Graded assignments and assisted students with computer-aided design coursework for up to eight hours per week.

INOVATI KINETIC METALLIZATION — Goleta, CA

Workshop Assistant and Intern — Nov 2009 to Jun 2010

Organized company product convention for domestic and international clients. Maintained workshop. Prepared and post-processed metallography test samples.

VOLUNTEERING

FIRST ROBOTICS COMPETITION (FRC) — Long Beach, CA

Programming Mentor — Sep 2013 to Jun 2014

Mentor for rookie FRC Team #4997, consisting of high school students from Long Beach Polytechnic, Wilson Classical, and Classical Conversations.

ENGINEERING WEEK BY BOEING (BCA) — Long Beach, CA

Outreach Volunteer — Feb 2012 to Feb 2013

Visited middle school classrooms yearly to generate interest in engineering fields and to present hands-on workshops on electromagnetism.

MESA SCIENCE AND TECHNOLOGY DAY AT UCSB — Santa Barbara, CA

Workshop Volunteer — Mar 2009 to Mar 2011

Presented hands-on workshops yearly on electromagnetism for visiting students in grades 6 – 12.