Rebecca (Becky) Abramowitz

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Education

UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA
MSE, **Robotics** (December 2018)   **GPA:** 4.00/4.00
Coursework: Design of Mechatronic Systems, Robotics, Feedback Control, Computer Graphics (C++), Product Design
***BSE*, Mechanical Engineering and Applied Mechanics. Minor in Computer Science** (May 2018)   **GPA:** 3.89/4.00
Coursework: Software Engineering, Data Structures, Engineering Complex Networks, Vibrations, Mechanical Design.
Activities: Alpha Omega Epsilon, Pledge/Social/Recruitment Chair. ASME, Webmaster.
Honors: Tau Beta Pi. Dean's List all years.

KINGS COLLEGE LONDON, Undergraduate Summer School (two Humanities courses)   June - August 2016

CASTILLEJA SCHOOL, Palo Alto, CA   GPA: 3.9   2011-2014
MENLO-ATHERTON HIGH SCHOOL, Atherton, CA   GPA: 4.0   2010-2011

Experience

AMAZON.COM, Seattle, WA   May – August 2017
Software Development Engineering Intern, Amazon Fulfillment Technologies
- Designed and implemented a full-stack web application to set configurations and overrides for fulfillment center capacity optimization; site is currently being used by fulfillment centers worldwide.
- Utilized Agile programming techniques, Git, Dynamo DB, S3, AngularJS. Collaborated with UX team to design UI.

UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA
Teaching Assistant CIS 120 (Programming Languages & Technique I)   August 2015 – May 2017
Mentor CIS 110 (Introduction to Computer Programming)   January – May 2015
- Member of staff for introductory computer science classes taught using Java (CIS 110, 120) and OCaml (CIS 120).
- Planned and led weekly recitation for 20+ students. Held office hours. Graded homework and exams.
- Head of recitation materials for two semesters. Created and established generalized recitation presentations and guides.

COMCAST, Sunnyvale, CA   May - June 2016
Intern, Office of VP of Product Strategy & Development
- Collaborated with xFi UX team to dogfood test software. Recommended ways to improve ease of use.
- Prepared comprehensive competitive analysis of consumer sentiment on home router products.

AUTODESK INC., San Francisco, CA   June - August 2015
Applied Innovation Intern, Office of the CTO
- Collaborated with two interns to design, CAD and create a novel, foldable bike helmet profiled in *FastCompany*.
- Provided input to Fusion360 software and design teams. Designed new features, including a spur-gear plugin.
- Earned Autodesk certification on MIG Welder, Shopbot CNC, Water Jet, 5-axis CNC, 3D Printer, Laser Cutter.

Projects

- Developed strategy and wrote code for 3 autonomous, hockey-playing robots for graduate mechatronics course.
- Developed code for a 6 DoF PUMA robot to create a 3-dimensional drawing using inverse kinematics.
- Implemented and tuned closed-loop PID control to stabilize a reverse pendulum robot.
- Currently working on a team to develop a proactive Deep Pressure Therapy wearable for children with Autism.
- Designed and co-wrote Android app for Penn Working Dog Center to track training of search and rescue dogs.

Skills & Interests

SOFTWARE LANGUAGES
- Proficient at Java, MATLAB, OCaml, C.
- Working knowledge of JavaScript, HTML, CSS, AngularJS, Dynamo DB, S3, Objective C, C++, Spring Framework.

MECHANICAL DESIGN
- Software: Proficient in SolidWorks, Fusion360. Some knowledge of COMSOL.
- Tools: Extensive experience with 3D Printers, Laser Cutters, Drill Press, Miter Saw, Band Saw. Experience with CNC.

SKILLS
- Adobe InDesign, WordPress, Google Docs, Microsoft Office, conversational Spanish.

INTERESTS
- Traveling, running, and exploring the outdoors. Long-time fan of the San Francisco Giants and Golden State Warriors.