Douglas Hutchings

1655 Euclid Ave, Apt #3, Berkeley, CA 94709 / (408) 489 1041 / 11douglash@berkeley.edu / dhutchings.github.io

EDUCATION

University of California, Berkeley *Graduated: December 2015*
Bachelor of Science in Mechanical Engineering
Courses:

Feedback and Control Systems	Mechatronic Design Laboratory
Artificial Intelligence	Introduction to Robotics
Signals and Systems	Design of Microprocessor Based Systems
Organizational Behavior	Introduction to Product Development

Computer Tools: Solidworks, Creo Elements, Windchill, Matlab, Simulink, Git, Eagle, ROS
(Programming) Languages: C, Java, C#, Python, Mathematica, JavaScript (Basic), Japanese (Basic)

PROFESSIONAL EXPERIENCE

Electronic Technician, E.E.C.S. Department, University of California, Berkeley *Jan 2016 – Aug 2016*
- Delivered logistical and technical support two upper division Robotics courses of thirty students each.
- Developed & deployed telemetry, control, and electrical systems to improve student learning in the classes.
- Worked with student teams to integrate new systems, and instructed students on best practices.
- Planned & Managed re-organization of several labs to increase teaching capacity.
- Provided A/V and recording support for webcasting lectures and special events.

Hardware Engineering Intern, Google Inc. *Summer 2013*
- Developed a robotic device to route network cabling bundles between devices in Data Centers (DCs).
- Defined a way forward for possible comprehensive and quick deployment of the system in DCs.
- Designed user-friendly sheet metal packaging for electronics to increase hard drive erasure throughput.

RESEARCH

Research Assistant, Biomimetic Millisystems Laboratory, UC Berkeley *Summer 2012, Fall 2014 – 2015*
- Developed a robotic control system and production method for ~30 gram crawler robots.
- Characterized vertical wall climbing capabilities of the crawler robots.
- Developed new compact motor controller to improve jumping capabilities of the robots.

Intern, Carnegie Mellon University – Silicon Valley *Summer 2011*
- Researched consumable free, maintenance free, and sustainable methods of cleaning Photovoltaic cells.
- Developed an easily deployable autonomous system to do the same for domestic applications.
- Set up and maintained an on-site prototyping shop consisting of basic machine and electrical development tools for use by the entire CMU-SV staff. Performed training and certification for those tools.

ACTIVITIES

Pioneers in Engineering (PiE) *Fall 2011 – Present*
PiE is a UC Berkeley student organization that runs STEM outreach programs for local East Bay schools.
- **Foundation Treasurer** *February 2015 – Present*
  - Led the Financial aspect of PiE's Foundation Project, a successful effort to establish PiE as a 501(c)(3).
  - Established financial procedures, filed taxes & IRS forms, and set up donation pathways.
  - Working to improve revenue stream in order to meet goal of establishing a reserve fund.
- **Robotics Competition Program Director** *Summer 2013 – Spring 2014*
  - Led the PiE Robotics Competition, an 8-week long event for 20 teams throughout the east bay, involving 300 High School Students, 100 College Students, and a budget of approximately $35,000.
  - Responsibilities included: fundraising, design and manufacture of custom robotics kits, recruitment and training of college mentors, and planning and execution of major events, while increasing staff retention.