David T. Flicker

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Education	**California Institute of Technology**, Pasadena, CA	June 2015

Pursuing B.S. Computer Science
Overall GPA: 3.9
Relevant coursework: Machine Learning, Computer Vision, Control Theory, and Embedded Systems

Work Experience

Hydroid, AUV market leader — June 2013 - August 2013
Software Engineer Intern
Integrated ability for vehicle to autonomously dock to underwater cable
Created build customization tool saving 5 hours of developer time per new build
Windows MFC, ZeroMQ, C++, and underwater acoustics

University of California, San Diego, Vinetz Group — June 2010 - September 2012
Research Associate
Independently developed a new, malaria transmission-blocking drug
Computational docking, python scripting, and fluorometric assays

Technical Projects

Caltech Robotics Team, — September 2012 - Present
Designing an autonomous underwater vehicle for AUVSI/ONR RoboSub competition
Electronics Lead / Project Manager
Developed motor control and sensor interface PCBs
Designed the overall electrical architecture of the system
Spearheaded the sponsorship and outreach activities of the team

Caltech Rover Team, won 2nd place and $4,000 — October 2011 - May 2012
Designed a remotely tele-operated rover for the NIA/NASA RASC-AL competition
Co-authored the initial proposal that earned the team a $10,000 grant
Lead Electrical Engineer
Designed the power system including batteries, routing, and voltage regulation
Custom-built a servo control board and 5 V power/signal distribution board

San Diego City Robotics, placed 15th/34 in 2011 — August 2009 - August 2011
Designed an autonomous submarine for AUVSI/ONR RoboSub competition
Helped faculty mentor develop a passive SONAR analysis circuit
Compiled the entire vehicle's documentation

Programming Tools

Environments:	Linux and Windows
Languages/Tools (apprentice and higher):	Python, MATLAB, bash, Haskell, Scheme, LaTeX, C/C++, x86 assembly, surface-mount soldering, electronic test equipment, and Altium

Honors   Summer Undergraduate Research Fellowship   Summer 2012

Activities and Hobbies   Two year member of NCAA Div. III Caltech Swim Team