

Zackary Anderson
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Zack Anderson

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310-270-3995

Education

Massachusetts Institute of Technology

Cambridge, MA

Candidate for a BS in Electrical Engineering/Computer Science, June, 2009. 4.5 GPA

Coursework: Artificial Intelligence, Algorithms, Linear Algebra, Power Electronics, Mobile Autonomous Systems, Differential Equations, Circuit Analysis, Rapid Prototyping, Signal Processing, Computer Systems Engineering, Probabilistic Systems, Computer Architecture, Principles of Software Development, Network/Computer Security

Beverly Hills High School

Beverly Hills, CA

Graduated with Highest Honors and a 4.5/4 GPA.

Experience/Leadership

Levant Power, Co-Founder (2008)

Cambridge, MA

Co-founded a cleantech start-up that is developing a regenerative suspension for the auto industry. Working on mechanical and electrical engineering, test-software-development, finance, and business-development.

Google, Platforms Engineer (Summer, 2007)

Mountain View, CA

Worked with a small team of interns to develop a fully-automated hardware testing system. Developed lab equipment device drivers and designed a USB-enabled control board.

Neuroengineering Group, MIT Media Lab, Embedded Biomedical Device Engineer (2007)

Cambridge, MA

Developed a portable EEG reader/transcranial current stimulator to improve memory retention. Created system and circuit design, board layout, and wrote embedded signal-processing software to convert EEG oscillations to the frequency domain to detect sleep states.

Telemus Solutions, Embedded Developer/Security Researcher (June, 2006 - present)

Falls Church, VA

Designed and developed portable wireless sensor devices implementing Bluetooth and 802.11b. Researched new technologies and presented findings. Reverse engineered software and hardware protection mechanisms.

Robotic Life Group, MIT Media Lab, Embedded Hardware Designer/Programmer (2006)

Cambridge, MA

Worked to create a wireless bathroom scale that interfaced with a robotic base station controller. Designed and built the scale and receiver circuit, and developed the embedded firmware on a PIC microcontroller.

Andertec Enterprises, Computer Consultant/Web designer (2002-2005)

Los Angeles, CA

Directed a self-created start-up computer consulting firm, employing three people. Administered the finances, advertising, website design both for Andertec and for clients, and company direction/management. Firm provided onsite computer support to approximately 40 private clients and businesses.

DARPA Grand Challenge, Primary Autonomous Systems Architect (2003-2005)

Palos Verdes, CA

Designed overall logic behind sensor fusion functions that allowed the PVRW Grand Challenge team vehicle to transverse the desert autonomously. Led a team of programmers to implement custom designed algorithms as well as stochastic models and a Kalman filter.

FIRST Robotics Team Co-founder/Leader (2004-2005)

Beverly Hills, CA

Founded a FIRST Robotics team at Beverly Hills High School that made it to Nationals. Raised over \$27,000 in funding from various sources, managed operations and logistics of the 40-person team, worked closely with the mechanical, programming, and website design aspects of the team.

Skills

Computers

Linux, Windows, and Mac, Java, C, Python, Verilog, Visual Basic, Security analysis, Reverse engineering, OS/software/hardware repair, Networking, Web applications, Flash, and Graphic design.

Electronics/Mechanical

Digital electronics design, Power-electronics design, Embedded systems, FPGAs, Microcontrollers, Automation and control systems, Wireless communications, CDMA and GSM, RFID, Physical security engineering, Metalworking/Machining, Laser-cutter, Waterjet, CNC Mill, Woodworking, and other fabrication.

Patents

"Integrated device for transcranial current stimulation and electroencephalography," Patent-pending, 2007.

"Regenerative Shock Absorber," Patent-pending, 2008.

Activities

Aviation (private pilot's license), Mountaineering, Filmmaking, Travel, Tennis, Caving, Fabrication, Programming, & tinkering

Honors & Awards

DARPA Grand Challenge Robotics Competition Finalist (2004), US FIRST Rookie All-Star Award (2005), George C. Newton Prize (2008), California Scholarship Foundation Award (2005), 1st Place at LA County Science Fair for autonomous robot (2003), National AP Scholar (2005), SFV Engineer's Council Robotics Engineering Excellence Award (2002).