

Education

Massachusetts Institute of Technology

Cambridge, MA

BS in Electrical Engineering/Computer Science.

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

Beverly Hills High School

Beverly Hills, CA

Graduated with Highest Honors.

Experience/Leadership

Levant Power Corp., COO/Founder (2008-Present)

Boston, MA

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

Google, Platforms Engineer (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.

Moca, Founder/Lead Developer (2008)

Cambridge, MA

Co-founded an organization that makes open-source software to deliver medical care in developing nations via mobile phones.

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 analyze EEG oscillations.

Raytheon Telemus, Embedded Developer/Security Researcher (2006)

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, Hardware/Software Developer (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, CEO (2002-2005)

Los Angeles, CA

CEO and founder of a computer consulting firm that served over 30 business clients. Administered finances, marketing, personnel, customer-relations, and company direction/management, in addition to technical work.

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

Palos Verdes, CA

Led a team of programmers to design/implement algorithms and stochastic models such as a Kalman filter. Designed logic behind sensor fusion functions that allowed our vehicle to transverse the desert autonomously.

FIRST Robotics Team, President (2004-2005)

Beverly Hills, CA

Founded a FIRST Robotics team that made it to Nationals. Raised over \$27,000 in funding, managed operations, logistics, recruiting, and technical development of a 40-person team.

Skills

Computers

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

Electronics/Mechanical

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

Patents

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

"Regenerative shock absorber," patent-pending, 2008.

"Regenerative control system for energy generators," patent-pending, 2009.

"Regenerative shock absorber system," patent-pending, 2009.

Activities

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

Honors & Awards

Popular Science Invention of the Year Award, MIT 100k Business Plan Competition Energy Track Winner, DARPA Grand Challenge Finalist, MIT Clean Energy Prize Transportation Winner, George C. Newton Laboratory Project Prize, U.S. Department of Energy TIAC Award, IDEAS Competition Finalist, SFV Engineer's Council Engineering Excellence Award.