Pol Rosello

See prosello.com for contact information and selected projects.

PERSONAL PROFILE

MS CS student at Stanford with experience in embedded systems and artificial intelligence.
Undergraduate ECE and CS double major at Cornell University.
Native fluency in English, Spanish and Catalan; intermediate fluency in German.

EDUCATION

Stanford University, School of Engineering, Stanford, CA (4.17 GPA)
Master of Science in Computer Science — *expected June 2017*

Cornell University, College of Engineering, Ithaca, NY (3.90 GPA)
Bachelor of Science in Electrical and Computer Engineering — *May 2015*
Bachelor of Science in Computer Science — *May 2015*

WORK EXPERIENCE

Flight Software Intern — *Jul 2015 – Sept 2015; Jun 2016 – Sept 2016*
SpaceX, Hawthorne, CA
Developed an FPGA-based, highly-accurate six-axis accelerometer and gyroscope sensor and fault simulator for a new IMU. Currently used in closed-loop, real-time mission simulations.
Implemented a bare-metal, flash-based file system used in the bootloader of several MCUs on Crew Dragon and Falcon 9.
Developed an FPGA-based test framework for remote, automated microcontroller tests.
Wrote SPI drivers for an MCU in one of Falcon 9's attitude control systems.

Undergraduate Researcher — *Jan 2014 – Dec 2014*
Batten Group, Cornell University
Writing and optimizing benchmark applications for a novel high-performance, energy-efficient parallel computing microarchitecture by mapping them to a research ISA. Contributions acknowledged in two 2014 IEEE MICRO papers.

Software Engineering Intern — *Jun 2014 – Aug 2014*
Cisco Systems, San Jose, CA
Worked within the Internet of Things Group on the Connected Grid Network Management System, used to deploy and manage ~10 million endpoint IP-based wireless networks for smart grids.
Developed suites in C# to automate the zero-touch deployment, tunnel provisioning, and firmware upgrades of field routers; automated testing of the front-end functionality of the product.

Teaching Assistant — *Aug 2013 – Dec 2014*
Cornell University
Held office hours and review sessions, graded student projects and exams for ECE 4750/CS 4420: Computer Architecture (Fall 2014), ECE 3140/CS 3420: Embedded Systems (Spring 2014) and CS 2110: Object-Oriented Programming and Data Structures (Fall 2013).

Research Assistant — *Oct 2012 – May 2013*
Molnar Group, Cornell University
Programmed an FPGA and designed a printed circuit board as a testing platform for a very low power, very low noise multi-electrode array (MEA) for electrophysiological neural recordings.

RELEVANT SKILLS

Coursework: Embedded Systems • Machine Learning • AI • Computer Vision • Neural Networks • Natural Language Understanding • Computer Architecture • Operating Systems • Design with Microcontrollers • Algorithms • Data Structures • Networks • Digital Logic • Signal Processing • Microelectronics • Functional Programming • Evolutionary Algorithms • Discrete Mathematics • Neuroscience
Technologies: C/C++ • Python/NumPy • Verilog • Lua/Torch • OpenCV • AWS • OCaml • PCB design • ASM • MATLAB

HONORS AND AWARDS

Cornell College of Engineering Jacobs Scholar
Dean's List every semester
International Baccalaureate Full Diploma Recipient and AP Scholar with Distinction