

539 Arroyo Seco
Santa Cruz
CA 95060

RUBEN K. LOPEZ

people.ucsc.edu/~rklopez
rklopez@ucsc.edu | 707-540-4836



EDUCATION

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

BS in Computer Engineering
Concentration in Networks
Expected June 2015
Jack Baskin School of Engineering
Cum. GPA: 3.2 / 4.0
Major GPA: 3.3 / 4.0

UNIVERSITY OF COPENHAGEN

Semester Study Abroad
Aug 2013 - Dec 2013 | Denmark
Department of Computer Science

COURSEWORK

CORE COURSES

Computer Systems & Assembly
Microprocessor System Design
Data Structures
Algorithms & Abstract Data Types
Logic Design
Computer Architecture
Electronic Circuits
Statics, Dynamics & Biomechanics
Technical Writing

NETWORKS COURSES

Network Administration
Network Programming
Operating Systems
Cisco Networking Academy

SKILLS

PROGRAMMING

Proficient
C/C++, C#, Python, Java,
JavaScript, Assembly
Familiar
HTML, PHP, XML, SQL, Verilog

FRAMEWORKS / SOFTWARE

Linux, Windows, Wireshark,
Echelon's IoT Platform,
PSoC Creator, GNS3, Unity3D,
Eclipse, PyCharm, Git

EXPERIENCE

CISCO | eSupport + Content Development Intern

Jun 2014 – Present | Santa Cruz, CA
Interns implement VPNs and other use-case scenarios on Cisco Small Business routers, switches, and wireless access points, and publish new instructional content for the online support community.

ECHELON SENIOR DESIGN PROJECT | Network Architect

Jan 2015 – May 2015 | Santa Cruz, CA

- Industrial *Internet of Things* project sponsored by Echelon Corp.
- Worked with a team of 5 (computer engineers + electrical engineers)
- Designed and implemented network layout and M2M communications.

DANISH ACADEMY OF DIGITAL INTERACTIVE ENTERTAINMENT

Sep 2013 – Dec 2013 | Copenhagen, Denmark
Collaborated with a production team of 15 students (made-up of managers, directors, artists, and programmers) in an environment that closely simulated a production in industry (scrum, agile project development, etc.)

SYBO GAMES APS | Research Intern

Oct 2013 – Nov 2013 | Copenhagen, Denmark

- Given work-in-progress-code and assets of a new game.
- Accomplished programming tasks for the project (using Unity3D).
- Presented the tasks to the company.

PROJECTS

SMART CART | Industrial I.o.T. Sponsored by Echelon Corp.

Jan 2015 – May 2015 | Santa Cruz, CA
Internet-connected, self-checkout enabled shopping cart with various sensors capable of item and theft detection, indoor location tracking, and building automation features (such as *follow-me* lighting).

LED CONNECT FOUR GAME via WIFI | Microcontroller Project

Dec 2014 | Santa Cruz, CA
Connected a microcontroller to an LED Display and a WiFi Module in order to play an Internet-connected two player Connect Four game.

SOFTWARE-DEFINED NETWORK | Network Administration

May 2014 | Santa Cruz, CA
Simulated an SDN with an *OpenFlow* network emulator (*Mininet*) to observe how an *OpenFlow* Switch contacts its Controller for forwarding instructions.

PROXY SERVER | Network Programming (C)

May 2014 | Santa Cruz, CA
Made a simple proxy server that parses incoming HTTP requests and forwards them to their destination if allowed by the access control mechanism.