

Justin Michael Cano

2230 Gellert Blvd. Unit 3303, South San Francisco, CA 94080
(650) 255-0098 | jcano001@ucr.edu | <http://www.justincano.com>

EDUCATION

Computer Engineering, B.S.

June 2014 (Projected)

University of California, Riverside, *Riverside, CA*

High School Diploma

June 2009

Archbishop Riordan High School, *San Francisco, CA*

TECHNICAL SKILLS

- Proficient in many leading programming languages, including C/C++, Java, Python, HTML, and PHP
- Experienced in Object Oriented Programming
- UNIX Administration (Ubuntu and Mac), including user commands, file processing, and installing the LAMPP stack
- Server/client socket programming (example code can be found in my BitBucket Software Construction repository)
- Web and iOS application development

LEADERSHIP POSITIONS

Executive Board Member (New Member Liaison), Zeta Phi Rho Fraternity, Theta Chapter

Sept 2012-Feb 2013

UC Riverside

Responsibilities include:

- Being the main instructor and mentor for new potential members
- Schedule and oversee all new member events
- Work diligently with all other officers to ensure a smooth transition of new members to become active members

WORK EXPERIENCE

Software Engineer Intern, JetHead Development

June 2013-Sept 2013

San Diego, CA

Responsibilities include:

- Software development in C++ for Set-Top-Box integration services involving sophisticated middleware solutions
- Debugged the company's RVU client application; Issue tracking communication through JIRA
- Worked with Broadcom embedded systems
- 'Board Bring Up', including powering up, mounting, and flashing the board using SSH and/or serial communication

PROJECTS

Intermediate Embedded and Real-Time Systems Final Project:

Home Automation System w/ Smart Alarm Clock

Using a variety of electronic components, I emulated a home automation system with an alarm clock that doesn't turn off unless it detects movement. The home automation system includes a pass code door lock and drape control system. This project was made possible with an ATmega1286 microprocessor coded entirely in C using the AVR Studio IDE. A Google Doc link to the source and video demonstration is provided for more information:

https://drive.google.com/folderview?id=0B-AI2C_nEwvTmwxY05uWjVzeHM&usp=sharing

Senior Design Project in Electrical Engineering (Embedded Systems):

Learning Thermostat (Nest Emulation)

The topic of study for my Senior Design in Electrical Engineering is the Nest Learning Thermostat, guided by Professor Ping Liang. My partner and I have a goal to create a system that behaves much like the Nest does: it learns its user's indoor temperature preferences and automatically sets the temperature on the thermostat. Our Nest is a Raspberry Pi embedded system coded in Python, with state machines executing as Python threads. The Pi accepts sensor data gathered by an Arduino Uno microcontroller through wireless serial communication using an XBee standard. The Pi also connects to a MySQL database through an API developed in PHP, which web and mobile applications can use to connect to. This 20 week project is still a work in progress; documentation is not yet available.

PUBLIC REPOSITORIES & LINKEDIN PROFILE

GitHub (used for personal projects) - <http://www.github.com/jcvno>

BitBucket (used for academic projects) - <http://www.bitbucket.com/jcano001>

LinkedIn Profile - <http://www.linkedin.com/in/justincano>