

Justin Legaspi Tamayo

jtamayo6@gatech.edu • jtamayo6.github.io • U.S. Citizen

OBJECTIVE

To secure an software engineering internship, preferably in systems or back-end development, for Summer 2017.

EDUCATION

Georgia Institute of Technology, Atlanta, GA August 2013 - May 2017
Honors Program, B.S. in Computer Engineering Overall GPA: 3.96/4.0
Study Abroad at Georgia Tech-Lorraine, France (Spring 2015)
Accepted to M.S. Program in Electrical and Computer Engineering (Fall 2017 - Spring 2018)

WORK EXPERIENCE

Applications Engineering Intern - Texas Instruments, Dallas, TX Summer 2016

- Benchmarked the dual Ethernet performance of Sitara (ARM Cortex-A) processors under broadcast storm conditions
- To automate testing, wrote bash scripts that used Unix utilities such as iperf, top, and devmem2
- Results and conclusions will be documented in an application note for industrial customers
- Tested compatibility of the Sitara AM5718 (ARM Cortex-A15) processor with the AM57xx GP-EVM (development board)

Computer Engineering Intern - BIT Systems, Sterling, VA Summer 2015

- Created a GUI application in Python and Qt to edit XML files containing signal parameters
- Program was shipped to the RF engineering sub-team and improved their productivity by preventing user errors
- Designed an X-Midas program that aggregates pre-recorded RF signal files to generate simulated recordings

PROJECTS

DART Bus Stop Assistant ("Darcy"), Python, TI Intern DIY Competition Summer 2016

- Amazon Alexa-powered voice app that returns the time for the next arrival at any Dallas bus stop or train station
- Runs on a BeagleBone with speaker/microphone and a custom PCB, all secured upon a 3D-printed mount
- Will be featured on the blog of DART, Dallas's public transit authority

IoT Power Strip, Python, TI Intern Side Project Summer 2016

- Amazon Alexa-powered voice app that controls individual power outlets and provides energy consumption info
- Runs on a BeagleBone with speaker/microphone, and wired to a relay board, power-sensing circuit, and power strip

Air Drum Set, C++, Final Team Project for ECE 4180 (Embedded Systems Design) Spring 2016

- mbed (ARM Cortex-M3) connected to two "drumsticks" (IMUs) and two "floor pedals" (force-sensing resistors)
- Based upon the drumsticks' positions, different sounds can be played through the MIDI-USB interface

RC Car and Controls Project, C, Hands-On Learning VIP Team Fall 2015 - Present

- Autonomous RC car that avoids contact with walls, using a PID control algorithm and a TI MSP430 MCU with ultrasonic sensor
- Wrote a software tutorial intended for other students who want to learn embedded systems

EXTRACURRICULARS

President - ECE Ambassadors Spring 2014 - Present

- ECE Ambassadors supports GT's ECE community via admissions events, community outreach, and interactions with faculty
- Duties include organizing prospective student tours, hosting academic workshops, and managing the ECE mentoring program

Mathematics Tutor - Cristo Rey Atlanta Jesuit High School Fall 2014 - Present

- Volunteer weekly to help underprivileged students in algebra and geometry

Violist - GT Symphony Orchestra and Chamber Strings Fall 2013 - Spring 2016

SKILLS AND AWARDS

Programming

Fluent: C, C++, MIPS Assembly, Python

Prior Experience: HTML, Java, MATLAB, Swift, VHDL

Software

Amazon Alexa, AWS Lambda, Code Composer Studio, EAGLE, Eclipse, Linux/Unix, LTSpice, PubNub, Quartus II, Qt, Wireshark

Hardware

ARM, Bluetooth, FPGAs, Function Generators, Logic Analyzers, Microcontrollers, Motors, Oscilloscopes, Soldering, Sensors

Honors and Awards

Outstanding ECE Junior Award - \$1000 scholarship from Eta Kappa Nu to a student of academic excellence, character, and service
Convocation Speaker for the GT Class of 2018 - Delivered the sophomore welcome speech to 2,700 new students in 2014