# **JUSTINCANO**

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## **EXPERIENCE**

## Data Engineering Fellow, Insight Data Science, Palo Alto, CA

Jun 2015 - Present

- » Built a data pipeline that runs a distributed process to create a hyperlink graph from Common Crawl's April 2015 web corpus and finds the page rank and reach of each vertex (<a href="http://jcano.me/meshwork">http://jcano.me/meshwork</a>)
- » Hyperlink graph created through batch graph processing using Spark and GraphX with resulting data saved to HBase in the serving layer for low-latency queries (<a href="https://github.com/bumrush/meshwork">https://github.com/bumrush/meshwork</a>)

#### Software Engineer, GBG Loqate, San Mateo, CA

Nov 2014 - May 2015

- » Worked a customer-facing role as a Software Engineer on the Support Team to communicate effectively with prospects, partners, and customers
- » Investigated, replicated, tested, and resolved incoming customer case issues
- » Designed and developed the first unit tests for the official release process using the googletest C++ Testing Framework
- » Implemented a lightweight regular expression matcher in C++ to improve country output formatting without performance degradation

## Embedded Systems Developer, University of California, Riverside, Riverside, CA

Jun 2014 - Jul 2014

- » Developed a Raspberry Pi camcorder for the University of California, Riverside Entomology Department in order to capture footage of insect eggs in remote urban and agriculture environments to look for natural predators of the Brown Marmorated Stink Bug
- » Worked closely and diligently with a UCR Entomologist to ensure the camcorder would be solar powered while recording HD video at certain times of the day and save recordings to an external mounted hard drive

#### Software Engineer Intern, JetHead Development, San Diego, CA

Jun 2013 - Sep 2013

- » Contributed to development of middleware solutions in C++ for DirecTV Broadcom Set-Top-Boxes
- » Tracked issues through JIRA and debugged the company's RVU client application
- » Commenced 'Board Bring Up', including powering up, mounting, and flashing the board using SSH and/or serial communication

# **EDUCATION**

## Computer Engineering, B.S.

Sep 2009 - Jun 2014

University of California, Riverside, Riverside, CA

## **TECHNICAL SKILLS**

- » Languages: C/C++/C#, Python, JavaScript, Swift, Scala
- » Big Data Technologies: AWS, HDFS, Spark, MapReduce, HBase
- » Web Technologies: HTML5, CSS3, Django, Flask, jQuery, Node.js
- » Design Patterns: Object Oriented Programming, Model View Controller

# **ACADEMIC & PERSONAL PROJECTS**

## everythinglocation.py, <a href="https://github.com/bumrush/everythinglocation.py">https://github.com/bumrush/everythinglocation.py</a>

May 2015 - Present

- » An open source Python wrapper library for the Everything Location REST API (http://www.everythinglocation.com)
- » Developed for practicing software engineering and library writing best practices
- » Implemented unit tests to ensure robustness of code
- » Continuous integration deployment onto Travis CI

**To the Top,** Senior Design Project in Computer Science (Graphics and Electronic Games)

Apr 2014 - Jun 2014

- » Conceptualized an original 3D vertical runner game
- » Developed for the mobile platform using the Unity3D game engine
- » Scripted game features include in-game menus, collision indication, saved game progress, and custom models and sounds
- » Implemented render culling algorithms to reduce latency and optimize for mobile devices
- » Licensed rights to a private game studio for future development and commercial release

Learning Thermostat, Senior Design Project in Electrical Engineering (Embedded Systems)

Sep 2013 - Jun 2014

- » Developed our own version of the Nest Learning Thermostat using a Raspberry Pi and an Arduino
- » Pi and Arduino communication via XBee wireless standard
- » Web app interface developed on LAMP stack with custom made PHP API
- » "Better Feature" includes polling for registered devices on the local network to determine "Home" or "Away" mode