

JEREMY CRUZ

SOFTWARE ENGINEER

Phone: 1-619-866-1569
Email: jere.cruz519@gmail.com
Website: <http://crosscodes.biz>
LinkedIn: [jeremy-cruz-a6bb51110](https://www.linkedin.com/in/jeremy-cruz-a6bb51110)
GitHub: [jdc011](https://github.com/jdc011)

Skill Set

Languages

C
C++
C#
Python
Java
JavaScript
Lua
SQL
HTML
CSS
XML
Batch Script
Shell Script
VBScript

Frameworks

Angular.js
Node.js
REST
RAIL
CRUD
Bootstrap
jQuery
Bluetooth
Socket
gRPC
pcap
KDIS

Tools

Visual Studio
Android Studio
Eclipse
PostgreSQL
Apache Tomcat
Firebase
Wireshark
Arduino
Travis CI
GitHub
SVN
AllChange

Operating Systems

Windows
UNIX
Linux
Junos

Objective

New grad software engineer searching for opportunity in San Diego to contribute 3 years professional programming experience, broad skill set, and leadership to **software development**, **networked systems**, or **embedded systems**.

Education

UC San Diego

September 2014 – June 2018

- Bachelor of Science, Computer Science and Engineering

Experience

Cubic Global Defense

June 2017 – May 2018

Software Engineer Intern

- Live Virtual Simulated Combat Training System
 - Provided combat training system to Nellis Air Force
 - Aided 2-way ground/ pilot communication via **Distributed Interactive Simulation** and **pcap**
 - Ensured flow accuracy debugging **multi-threaded** applications
 - Made mission monitoring graphical with web UI via **Angular.js** and **JSON**
 - Eliminated major web server lag resulting to **92%** faster speeds
- Network Communication
 - Helped monitor training with **packet sniffing** via **Wireshark dissectors**
 - Allowed user to see recorded ground/ air trends via human-readable **packet core dumps**
 - Optimized dissectors to quickly show outputs of up to **8 hours** of mission recording time
 - Secured network with **Junos** configuration of **DHCP** with **static IP tables**

Engineers for a Sustainable World

October 2015 – June 2018

Software Team Lead

- Leadership Roll
 - Aided global sustainability holding **agile scrum** meetings to communicate goals and assign tasks
 - Ensured high quality releases with documentation, code reviews, CI pipeline, and mentoring
- [Solar Interact](#)
 - Provided navigation and sustainability education with **embedded system**
 - Helped visitors navigate Price Center with **Android** app utilizing **Google Maps API**
 - Educated users on solar vs. electrical power efficiency via **Android** tablet and **Arduino** run game
 - Made game fast with **Bluetooth** watt output on real-time graph via **Graph View**
 - Optimized game control via **embedded Arduino programming** of hand crank electrical generator
 - Provided hands-on training and collaboration for **structural**, **electrical**, and **software** engineers
- [Solar Chill](#)
 - Lessened carbon emissions by **14.98%** via solar powered charging station
 - Implemented calculations API verifying energy use and efficiency in **C**
 - Verified cleanliness with displayed metrics via **Arduino** programmed LED scrolling text

Relevant Side Projects

Crosscodes Portfolio and Blog

December 2017 – present

- Documented current career/ technical experience to showcase via website
- Designed website user-friendliness and responsiveness with **Bootstrap** and **jQuery**
- Retained documentation of learnings, experience, and career advice via blog

IoT Smart Fridge

October 2017

- Limited food waste via **OpenCV machine learning** camera to count food with **MongoDB**
- Kept user informed of near food expiration and shortage by texting user via **Twilio**
- Awarded SDHacks 2017 **grand prize**

GUI Machine Learning Applet

March 2017 – April 2017

- Demonstrated **machine learning** algorithms for education with GUI applet in **Java**
- Aided user install/ uninstall of software via **scripts** on **Windows** and **Linux** OS's
- Designed user-friendly UI by reverse engineering API via **Jad decompiler**

Inventory Tracking Applet

December 2014 – January 2015

- Took initiative as restaurant shift manager by applying programming to reduce labor
- Reduced labor at Church's Chicken by **38%** via **Java** applet automating inventory tasks
- Eliminated manual calculations via **Java** written food/ cash counts, variances, and shift statistics
- Made data easy to report via save feature of Excel spreadsheets of outputs