# Young Yun

yyun@ucsd.edu
youngjinyun.com
(510)-909-6676

## Education

| | |
|---|---|
| University of California, San Diego | Expected Graduation: June 2018 |
| Computer Engineering (CSE) | GPA: 3.63 |

## Experience

**Leidos Inc. (San Diego, CA)** — Jun-Aug 2015
*Technical Software Intern*

- Led a guided research effort on developing a secure firmware update turret system for Internet of Things devices. Extensively utilized embedded ARM Cortex devices such as Banana Pro.
- Implemented proof of concept for the over-the-air turret system. Communications secured with proprietary TLS/SSL libraries compressed and optimized for RTOS usage on Particle Photon boards.
- Penetration testing with Kali Linux and its installed tools: nmap, hydra, john the ripper, etc., on dummy servers and routers. Retrieved and cracked hashed data.

**Students for the Exploration and Development of Space (SEDS)** — October 15 - current
*Embedded Systems specialist on Moonshot Alpha Project team*

- Part of university team for CubeQuest, a NASA initiative to design and send our satellite into lunar orbit in 2018.
- Integrated ARM Cortex A9 board with other components of CubeSat, utilizing GPIO, SPI, I2C, UART protocols.
- Utilized SystemC with QEMU to test even-driven processes to emulate CubeSat flight software.

## Projects & Activities

**Compiller** — October 2015 – current
*Team Lead*

- Designed prototype concept of device that improves seniors' quality of life by automating the pill consuming schedule process. The device notifies seniors when to take medicine throughout the day.
- Utilized human-centric design philosophies, focusing on patient interaction throughout the process.

**PeerMentor** — March 2016

- Mobile web app that connects users in order to facilitate exchange of skills and knowledge.
- Implemented with Human-Computer Interaction principles developed in COGS 120 studio.
- Utilized Bootstrap, Javscript, CSS, HTML for front end, along with Node.js, jQuery to handle server side.

## Advanced Coursework

**Advanced Data Structures (CSE100)**

- <u>File Compression</u> – Implemented compression algorithm in C++ utilizing Huffman trees, encoding/decoding.
- <u>Boggle AI</u> – Designed efficient Boggle game solver by utilizing k-ary trees, multi-way tries, and memoization.
- <u>BST/RST</u> – Implemented and analyzed binary search trees, randomized search trees with test-driven development.

| | |
|---|---|
| Design and Analysis of Algorithms | Software Engineering (current) |
| Introduction to Human-Computer Interaction | Theory of Computability (current) |

## Skills

- Experienced with C++, C, Java, vim, git, SPARC assembly, Linux (Ubuntu, Lubuntu, CentOS), HTML/CSS, VMs
- Familiar with Javascript, Python, Bootstrap, Swift, ARM assembly, Node.js, JQuery
- Network penetration testing w/ Kali Linux: live port sweep, nmap scan, metasploit, dictionary attacks, hydra