Young Jin Yun

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Education

University of California, San Diego

Computer Engineering (CSE) Provost Honors FA'14 – SP'15

Expected Graduation: 2018

GPA: 3.62

Experience

Leidos Inc.

La Jolla, SU '15

Technical Research & Development Intern

La Jolla, CA

- Led an independent research effort on developing a <u>secure</u>, <u>cryptographically based firmware update turret system</u> for IoT devices. Extensively utilized embedded ARM Cortex A7, M4, M3 devices, along with MMU optimization.
- Worked with senior engineers and <u>implemented proof of concept</u> for the <u>over-the-air</u> turret system. Communications secured with proprietary TLS/SSL libraries compressed and optimized for RTOS usage on Particle Photon boards.
- Penetration testing with routers.

Personal Projects

You See SD FA '15

- Location sharing and graphing application that <u>displays heat map of densely populated areas of UCSD campus, using location data from smartphones.</u> Coded at SDHacks 2015, plan on finishing and polishing up.
- Utilized HTML/CSS, JS, some PHP with Google Maps API with MySQL server
- Visit at campathon.mybluemix.net!

Personal Website SP '15

- Used Bootstrap, Javascript, CSS, HTML in order to create a personal website in one night at UCLA's Hackathon.
- Visit me at www.youngjinyun.com!

Leadership and Activities

SD Hacks 2014-15

Financial Team Corporate Sponsorship Outreach

• Worked with other student organizers to plan and make possible UCSD's first official hackathon. Responsibilities included securing venues and sponsors for more than \$300,000. Personally secured \$10,000 of funding.

Global TIES: Digital Vision Screening

FA '15

Crescent Detection Team Lead, Webmast

- Image analysis and detection of crescent-shaped refractive errors indicative of myopia, amblyopia, astigmatism.
- Responsible for organizing team group photo, uploading and maintaining DVS's description, member list.

Skills

- Experience with C++/C, Java, vim, git, SPARC assembly, Linux VMs (Ubuntu, Lubuntu, CentOS), HTTP/CSS
- Network penetration testing w/ Kali Linux: live port sweep, nmap scan, metasploit, dictionary attacks, hydra.
- Some familiarity with Javascript, Python, Bootstrap, Swift, MySQL, ARM assembly, PHP

Relevant Coursework

Advanced Data Structures

- <u>High performance data structures</u> and supporting algorithms, with use and implementation of (un)balanced trees, graphs, priority queues, and hash tables. <u>Memory Management</u>, advanced pointer usage, recursion.
- Theoretical and practical performance analysis, including average case and edge case.

Data Structures & OOD

- Performed case study analysis of approaches to Object-Oriented design in C, C++, Java, to recommend which approaches are best suited to solve programming problems.
- Projects involved implementing a <u>stack-based calculator</u> that evolved to utilize <u>binary trees</u>, <u>circular linked lists</u>, and hash tables, as well as analyzing each data structures' Big O efficiencies.

Algorithms & Systems Analysis

- Mathematical tools for qualitative/quantitative analyses of algorithms and computer systems.
- Explored mathematical theory of discrete structures useful for modeling and designing computational processes. Topics covered: enumeration, recurrence relations, graph theory, asymptotic notation, discrete probability.

Intro to Analog Design

- Fundamental circuit theory, time-varying signals, transient first order circuits, steady-state sinusoidal response.
- Lab experience with equipment such as volt/ammeters and function generators.