

Gabriel Raphael Garcia Montoya

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Young enthusiastic programmer looking for an opportunity that will utilize and expand my skill set. I am mainly interested in Distributed System Development & Infrastructure, but am also very enthusiastic & interested in System Security, Machine Learning, Computer Vision, and Mobile App Development

EDUCATION

University of California, Santa Cruz
B.S. Computer Science & Engineering
Standing: Senior

Expected Graduation: June 2020
Computer Science GPA: 3.2
Cumulative GPA: 3.05

PROFESSIONAL EXPERIENCE

SOFTWARE ENGINEERING INTERN || GOOGLE

KIRKLAND, WA (2019 - 2019)

- Expanded & improved the security features of Google Cloud's Identity-Aware Proxy.
- Developed, designed, & implemented a feature to allow customers to securely delegate their own access policies for services.
- Allowed customers to generate their own claims, and pass those claims to their GCP services in the form of JWTs.
- Prepared documentation for plans to roll out the product to customers.

FLIGHT SOFTWARE ENGINEERING INTERN || SPACE SYSTEMS LORAL (SSL)

SAN JOSE, CA (2018 - 2018)

- Wrote telemetry command categorizer for easy command identifying.
- Developed various Python scripts to streamline and automate our Flight Simulator.
- Designed and constructed a third-stage boot-loader for flashing custom kernels.
- Wrote drivers for our custom Linux install.

SOFTWARE ENGINEERING STUDENT || GOOGLE CODE U

SANTA CRUZ, CA (2017 - 2018)

- Implemented message emotion analysis through Google Cloud Computing.
- Designed and developed a web based chat app using JavaScript, HTML, and CSS in a team of 4.
- Played substantial role in designing and creating the interface for the app.

ANDROID DEVELOPER - DIGITAL FOREST LABS || FREELANCE

SANTA CRUZ, CA (2017 - CURRENT)

- Managed assigned team and utilized different flow models (MVC, AGILE).
- Programmed vital parts of the application's features and utilized open-source libraries.
- Handled communication between my team and the customer to report any issues or pivots.

TUTOR - ADVANCED DATA STRUCTURES || UCSC

SANTA CRUZ, CA (2017 - CURRENT)

- Walked through errors with students to help them understand their mistakes.
 - Assisted students understand data structures by giving small programming problems.
 - Concentrated on teaching linked lists, bloom filters, bit vectors, and hash tables.
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PROJECTS

Smart Mirror with Machine Learning and Computer Vision | Python, Tensorflow, Google Cloud Vision (2018 - current)

- Working on a smart mirror that can identify the user using OpenCV and Tensorflow and displays their closet
- Uses hand "air" gestures to scroll through outfits

Micro-Controller Heap/Stack Smashing | MSP430 ARCH, GDB, Hopper Disassembler

(2018 - 2018)

- Completed microcorruption.com, a CTF for the MSP430 board
- Used industry tools such as Hopper disassembler and GDB

Virtual Closet E-Commerce App | Java (Android), Swift (iPhone)

(2017 - 2018)

- Utilized OpenCV for image segmentation - specifically GrabCut (Graph Cut).
- Allowing for peer to peer commerce

High-Speed Word Filter | C

(2016 - 2016)

- Constructed high-speed filter (tested up to 1GB files) that detect words from a predetermined list in a less than a second.
 - Utilized: Bloom Filter, Hash Tables, Salts, Heaps, Queues & Bit Vectors
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LANGUAGES & TECHNOLOGIES

Proficient: C++ (preferred), Java, Python, JavaScript, C, x86-64 Assembly, MSP430x Assembly

Familiar: ADA, Perl, HTML, CSS, Haskell

Technologies: Protobuffers, OpenCV, Git, Android Studio, xCode, IDA Pro, Raspberry Pi, Unix