

Gera Groshev

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Education

University of California, Berkeley | B.S. EECS | Dec 2017

Cosumnes River College | A.S. Electrical/Computer Engineering/Mathematics | May 2015

Technologies: Python, C++, Java, Go

Experience

Software Engineer – Arista Networks – Santa Clara, CA

Jan 2018 – Present

- Designed and implemented drivers and testing infrastructure to support IEEE 802.3at/bt Power over Ethernet which has been shipped and working reliably on thousands of switches
- Implemented the API used to add support for white box switches

Software Engineering Intern – Qualcomm – San Diego, CA

May 2017 – Aug 2017

- Project 1: Unity Snapdragon VR app showing a 3D grid of multicolored cubes, which was used for testing
- Project 2: Worked with Tango/VR team to display textures created by their SDK via WiFi display. This involved reading OpenGL textures and communicating with WiFi display code included as part of the Android build
- Implemented project 2 at the system level which will eventually impact all Qualcomm VR enabled Android devices

Teaching Assistant for iOS Development – UC Berkeley

Jan 2017 - May 2017

- Coordinated and aided in running iOS Swift development labs, held office hours, and graded assignments

Team Lead for SMUD Solar Regatta – Sacramento, CA

Nov 2014 – May 2015

- Achieved Awards: Judge's Choice, Best Technical, Best Design, Most Artistic, Best Video
- Led the electrical and controls design team in the design of a solar powered boat for a solar regatta competition
- Designed an autonomous sun tracking device and algorithm. Used Arduino microcontroller, motors, and sensors

Select Projects

Hitman – Python

Nov 2017

- A tool for reliable TCP/IP communication and detection in the presence of on-path connection reset censorship technologies and firewalls (can get your packets past the Great Firewall of China)

Secure File Store – Go

Sept 2017 – Oct 2017

- A secure client for storing and sharing encrypted data while maintaining confidentiality and integrity
- Primitives used: PBKDF2, RSA Encryption and Signature, Symmetric Key Block Cipher, Hash MAC

Pintos Operating System – C

Feb 2017 – May 2017

- Implemented a multilevel feedback queue scheduler, process control syscalls, and file syscalls
- Implemented a memory based cache to minimize disk accesses for use with the extended filesystem

Pet Detective – TreeHacks 2017 – Stanford – Google Cloud Vision, Python, HTML, CSS, JavaScript

Feb 2017

- 1st Place Winner, Best Use of Google App Engine
- Asynchronous, computer vision based pet matching service with Message bot frontend and Venmo integration

Air Doodle – Gesture Recognition Toolkit (GRT) for Deep Learning, Python, C++

Oct 2016 – Dec 2016

- A glove device that classified gestures as characters. Raspberry Pi, Arduino, and LED matrix to display characters
- Used 9 axis sensor, sensor fusion library, and open source gesture recognition toolkit for ML to train on samples

Accomplishments

- TreeHacks 2017:** 1st Place Winner, Best Use of Google App Engine
- SMUD Solar Regatta:** Judge's Choice, Best Technical, Best Design, Most Artistic, Best Video
- Solar Powered Trash Compactor:** \$5000 grant, Excellence in Engineering, Best Energy Award, Top 3 in Engineering
- MTHS Industrial Technology Departmental Award**
- MTHS Design and Technology Academy Scholarship**
- MESA Scholarship**
- Best Video Game**
- President's Volunteer Service Award**