

Gera Groshev

Berkeley, CA • 916-533-5164 • geragroshev@gmail.com • github.com/GeraG • linkedin.com/in/geragroshev

Education

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

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

Languages: Python, C++, Java, Go

Experience

Software Engineer – Arista Networks – Santa Clara, CA

Jan 2018 – Present

- Designed and implemented drivers to support IEEE 802.3at/bt Power-over-Ethernet which has been shipped and working reliably on thousands of switches
- Implemented the software testing infrastructure to support the hardware topologies required for testing Power-over-Ethernet switches
- Contributed to 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. Implemented system level changes to read OpenGL textures and communicate with WiFi display code within the Android build

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**