Scott Bauersfeld
Poway, CA | sbauersfeld@g.ucla.edu | (858) 504-1203 | U.S. Citizen

Education
University of California, Los Angeles

Master's in Computer Science   **December 2020**
Bachelor of Science in Computer Engineering   **June 2020**
Honors: Departmental Scholar in Computer Science, Dean's Honor List, UPE inductee
GPA: 3.99

Technical Skills
- **Languages:** *experienced* in C, C++ and Python; *proficient* in MATLAB, Bash, JavaScript and Lisp
- **Toolchains/Workflows:** Keras, TensorFlow, ONNX, Git, Perforce, Agile, Unit testing

Work Experience
Qualcomm – Software Engineering and Machine Learning Intern   **June 2019 - September 2019**
Project Objective: Enable ONNX Runtime machine learning framework to execute on DSP cores
- Implemented dynamic quantization to accelerate inferencing on the edge for mobile devices
- Achieved inferencing rates of up to 100 FPS for popular models such as MobileNet, SqueezeNet, ResNet, YOLO, and SSD with little accuracy loss

Symantec – Software Engineering Intern   **June 2018 - September 2018**
Project Objective: Update a C++ virus scanning API to automatically remove/replace infected files
- Implemented critical remove/replace features that were released to support product teams around the world and are now used on hundreds of thousands of devices
- Provided 100% unit test coverage in C++ as well as system tests in Python

General Atomics – Engineering Intern   **July 2017 - September 2017**
Project Objective: Automate a Dual Confocal Microscope (DCM) measurement device with LabView

Research Experience
AI Augmentation for Brain-computer Interfaces   **September 2019 - Present**
- Processing and filtering EEG data for BCI applications and applying machine learning techniques to predict intended cursor movements
- Augmenting typing tasks with NLP networks and movement tasks with computer vision

Projects
Fazeka Score Prediction   **June 2019**
- Created convolutional neural networks to assign one of four Fazeka scores based on white matter hyperintensities in MRI scans
- Incorporated transfer learning with pre-trained Keras ResNet models to improve accuracy when training on a small data set

Leadership Experience
UCLA Backpacking Club Technical Officer   **September 2018 – Present**
- Assist in managing a club with over 100 hundred members and plan events to build a community of people with a passion for the outdoors

The Coding School Teacher   **January 2019 – March 2019**
- Prepare lessons and teach programming fundamentals to middle school students

Outdoor Adventures Guide   **September 2017 – September 2018**
- Prepare, coordinate, and lead wilderness trips as a guide and wilderness first responder