

Scott Bauersfeld

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Education

University of California, Los Angeles

Master's in Computer Science

December 2020

Bachelor of Science in Computer Science

December 2020

GPA: 3.99 | **Honors:** Departmental Scholar & Summa Cum Laude

Technical Skills

- **Languages:** C++, Python, JavaScript, Go
- **Technologies:** AWS, PyTorch, TensorFlow, React, Redux, Node.js, Docker, Git, Agile

Work Experience

Amazon Web Services – Software Development Intern

June 2020 - September 2020

- Developed a REST API to aggregate 10,000 service logs per minute from 20 AWS regions spanning 6 continents [**API Gateway, Lambda, CloudFormation, Node.js**]
- Created an interactive WebTool to display aggregated service logs [**JavaScript, React, Redux**]

Qualcomm – Software Engineering and Machine Learning Intern

June 2019 - September 2019

- Implemented an execution provider to perform inferencing on ONNX machine learning models
- Quantized deep learning models to reduce inference latency by 60x for models such as MobileNet and ResNet [**C++, Deep learning**]

Symantec – Software Engineering Intern

June 2018 - September 2018

- Added capability to remove or replace virus-infected files with a popular virus-scanning tool
- Provided 100% unit test coverage in C++ and integration tests in Python [**C++, Python**]

Research Experience

Brain-machine Interfaces

September 2019 - Present

- Implemented deep convolutional and recurrent neural networks to predict imagined directional movements for brain-machine interfaces [**PyTorch, Deep learning**]
- Preprocessed EEG signal data to reduce noise and improve accuracy [**Signal processing**]

Projects

Paxos-based NoSql Database

June 2020

- Designed a key-value database service that provides scalability through sharding and strong consistency through the Paxos protocol [**Go, Distributed systems**]

Double Deep Q Learning

May 2020

- Implemented and trained Double Deep Q Learning models to play Breakout based on ideas in “Human Level Control Through Deep Reinforcement Learning” [**PyTorch**]

Automatic Speech Writer

May 2020

- Summarized over 1200 presidential speeches with pretrained BERT models [**PyTorch**]
- Finetuned GPT2 models to automatically generate speeches when given a summary input

Leadership Experience

UCLA Backpacking Club Officer

September 2018 – June 2020

- 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