Vikranth Srivatsa

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EDUCATION

University of California Berkeley (Class of 2022)

August 2018 - May 2022

Bachelor of Science: Electrical Engineering and Computer Science

Relevant Coursework

Operating Systems and Parallel Programming Signals and Systems Computer Security

Data Structures and Efficient Algorithms Probability and Random Processes Compilers
Digital Design and Integrated Circuits Intro to Machine Learning Databases

Skills

Languages: Python, Golang, Java, C, Scala, Rust, Verilog, Risc-V/x86, C++ Other: Pytorch, Tensorflow, Natural Language Processing, Keras, OpenCV

WORK EXPERIENCE

→ NASA Ames Research Center Research Intern - Paper in Progress

June 2021 - Present

- Created an efficient serverless scheduling framework across client, 5G networks, and the cloud.
- Wrote heuristic and linear programming based algorithms for optimal code placement on compute nodes
- Optimized memory and cost with serverless Kubernetes, AWS, GCP, and Azure
- → UC Berkeley RISELab ML Researcher Paper in Progress

Feb 2021 - Present

- Investigating how overparameterization affects generalizations on spurious correlations
- Design and run research experiments to test model size, subgroup robustness and counts, and pretraining
- Automatically constructed spurious correlation large scale image datasets with Imagenet
- → Amazon Alexa Software Development Engineer Intern

May 2020 - August 2020

- o Built paramater tracking to process models used in ranking content in the Alexa Mobile App
- o Designed and built dev tool for experiment tracking, managing A/B model testing, and dashboards
- \rightarrow **Amazon AWS** Software Development Engineer Intern

May 2019 - August 2019

- Supported popular open source features on AWS SAM-CLI(5.7K stars)
- Added support for cloudformation and cloudformation intrinsic templating resolution in AWS SAM-CLI
- o Built a Serverless Testing Framework to benchmark and test AWS Serverless infrastructure
- → Circles Startup Chief Technology Officer

September 2018 - May 2019

- Created an efficient news recommendation system using feed ranking algorithms and collaborative filtering
- Setup production ready infrastructure for a dockerized Flask backend with GraphQL with red blue CI

PROJECTS

\rightarrow Passive Listening Smart Speakers - Berkeley Blues Security Lab

Feb
 2020 - Present

- Built machine learning NLP models to classify different intents for passive listening and speech
- Setup architecture and workflow to run smart speaker with dynamic skills for experiment
- Wrote noise filtering/detection algorithms in order to improve and detect intents

→ Statistical Car Traffic Simulation

Fall 2019

- o Modeled car speed, accident rate, lane size, switching lanes, and many more to simulate the traffic
- Handled multithreaded events in golang synchronizing using mutex/locks
- Created realtime demo with websockets, cli, and react.js

\rightarrow Instagraders

March 2018

• Analyses and grades AP Tests using NLTK, tesseract, OpenCV and cosine vector similarity algorithms

AWARDS

National Science Foundation I-Corps Startup Winner Synopsys Science fair ACM and Engineering Award 1st of 1100 Berkeley students in algorithm comp. Berkeley EECS Honor Society with HKN(top 25%)