

# Vikranth Srivatsa

vsrivatsa@berkeley.edu ◊ github.com/vikranth22446

## 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 - Published at NeurIPS Workshop*    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
  - Built parameter tracking to process models used in ranking content in the Alexa Mobile App
  - Designed and built dev tool for experiment tracking, managing A/B model testing, and dashboards
- **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
  - 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

---

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