Sumukh Shivakumar

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Education

University of California, Berkeley, Berkeley, CA

2015 - Present

B.S. Electrical Engineering & Computer Science

Relevant Coursework:

- EE/CS: Python/Scheme/SQL Programming, Data Structures, Machine Structures, Signals/Systems
- Math: Probability Theory and Discrete Math, Multivariable Calculus, Linear Algebra & Diff. Equations

Skills

Proficient in Java, Python, Android Development, C, SQL, Scheme, MIPS, HTML/CSS; **Familiar** with Perl, JQuery, Swift, JavaScript

Technologies: Git, Adobe CC, Android Studio, Xcode, IntelliJ

<u>Experience</u>

Verizon Communications Inc: Software Developer Intern in Network Systems

2017

- Designed/Developed customizable user behavior dashboard for the Dynamic Network Manager
- Patented a Machine Learning Algorithm to optimize 5G Antenna placement (Patent being processed)

Mobile Developers of Berkeley: Android Developer

2017 - Present

- Designed/Developed & Published Android App *Preserve* with three teammates
- Design and develop Android applications at UC Berkeley's Premier Mobile Development Organization

UC Berkeley IEEE: Technical Operations Officer

2017 - Present

- Maintained/cleaned servers throughout the UC Berkeley EECS Department. Solved any computer/server related technical problems across campus

Stanford University: Undergraduate Researcher

2016 - 2017

- Undergraduate Researcher continuing to work under Dr. Yu Sun, automating IADL cooking tasks.
- Focusing on Video Event/Object detections for network training

Robot Perception and Action Lab: Undergraduate Researcher

2016

- Worked under USF's Dr. Yu Sun, to design software programs that intelligently automate and learn cooking tasks. Focused on a Functional Object Oriented Network & used NLP and WordNet to optimize robot's task awareness
- Worked on Computer Vision projects to further enhance automatic understanding of cooking events using YouTube cooking videos

UC Berkeley EECS Department: Lab Assistant

2016

- Assisted over 20 students a week through Python projects/lab assignments, with office hours & one-on-one tutoring

Projects

Preserve (Java/Android): Grocery tracker that notifies users when food items expire using OCR technology

- Gained deep experience with Google Mobile Vision API (OCR), Firebase database, UI/UX

MDB Socials (Java/Android): Helps students plan/host social events & see who's interested in attending

- Gained great experience with Firebase Database/storage/authentication, Recycler Views, UI/UX

YouTube Alert (JS/Web): Presently working on a Chrome extension that notifies and links to newly uploaded YouTube subscriber videos.

- Gained experience with YouTube API, JavaScript, HTML, & CSS.

Apache Spark Video Compression: Implemented a scheme using Discrete Cosine transform to perform Video Compression

- Gained experience with Apache Spark & OpenCV

Honors

UC Berkeley - College of Engineering - Dean's Honor's List

1st Place - Verizon Company Wide Intern Hackathon 2017

Mu Alpha Theta - National Math Honor Society - National Scholarship Recipient

Academy of Applied Sciences Distinguished Scholar - Published paper on Nanomechanic drug delivery to the brain