# SUMUKH SHIVAKUMAR

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GitHub: sumukhshiv https://sumukhshiv.github.io

### Education

University of California, Berkeley - Electrical Engineering and Computer Science, B.S.

May 2019

- ❖ EE/CS: Python/Scheme/SQL Programming, Data Structures, Machine Structures, Signals and Systems
- \* Math: Multivariable Calculus, Linear Algebra & Differential Equations, Probability Theory and Discrete Math
- \* Other: Web Design, Mechanical Physics, Perspectives in Engineering, Social Implications of Computers

# Work Experience

#### Verizon Communications Inc.

Summer 2017

Joining the Network Systems Team this summer as Software Developer Intern

#### Stanford University - Undergraduate Researcher

2016-Present

- Continuing to work under Dr. Yu Sun, automating IADL cooking tasks.
- \* Focusing on Video Processing for Functional Object Oriented Network training data optimization

### **Robot Perception and Action Lab**

2016

- Worked under USF's Dr. Yu Sun, now at Stanford, to design software programs that intelligently automate and learn IADL tasks.
- Focused on a Functional Object Oriented Network for cooking and used Natural Language Processing 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**

2016

Assisted during lab & office hours for Berkeley's intro CS course taught in Python, Scheme, & SQL

#### XPRIZE After Earth Challenge

2013

- Invited as Brand Ambassador to launch Sony Pictures, XPRIZE Robotics Competition in partnership with After Earth Film
- Launched the competition alongside Will and Jaden Smith at the Film's Miami Premier

# **Projects**

#### YouTube Alert

- Presently working on a Google Chrome extension created with YouTube API, JavaScript, HTML, & CSS.
- User dependent software that notifies and links to newly uploaded subscriber videos.

### sumukhshiv.github.io

Personal website developed from scratch using HTML, CSS, & JQuery

#### **ROOMiES - Roommate Locator**

Presently working on an Android Application used to connect roommates with Google's Maps API, Cloud client, & Firebase Apache Spark Video Compression

Implemented a scheme using Discrete Cosine transform to perform Video Compression using Spark, OpenCV

## Skills

- ❖ Proficient: Java, Python, C, SQL, Scheme, MIPS, Git, JavaScript, HTML, CSS
- Familiar: Perl, JQuery, Android, Adobe CC, Android Studio, Swift, Xcode, IntelliJ

# Honors / Awards

- UC Berkeley College of Engineering Dean's Honor's List
- Mu Alpha Theta National Math Honor Society National Scholarship Recipient
- Academy of Applied Science Research Scholar for Publishing Nanomachines Cancer Treatment Paper