

Sartaj Singh Baveja

<http://sartajbaveja.com> | sartaj@ischool.berkeley.edu | 510-766-9055

SKILLS

PROGRAMMING

Python • C • C++ • JavaScript
React • TypeScript • Matlab
MySQL • MongoDB • InfluxDB
OpenCV

SERVICES

Google Cloud Platform • Flask
Amazon Web Services • Git

LINKS

Google Scholar:// [Sartaj Baveja](#)
Github:// [sartaj10](#)
LinkedIn:// [sartajsinghbaveja](#)
Twitter:// [@sartaj1004](#)

COURSEWORK

Data Structures and Algorithms
Computer Systems Organization
Computer Aided Design
Operating Systems
Software Engineering

OPEN SOURCE

PROJECTS

CERN Particle Explorer
SafrZone, CHIMEHACK2 Winners
Periscope.io, Zomato
Smart Physio, MIT Media Lab

AWARDS & HONORS

- | | |
|---------|--|
| 2015-16 | NSITOnline Web Team Lead |
| 2012-16 | Merit Scholarship Awardee |
| 2015 | Hackathon Winners Engineering Excellence Award by Twitter |
| 2015 | Accepted to the MIT Media Lab Workshop |
| 2012 | Gold Medal for 7 years of academic excellence in high school |

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

MASTERS IN DATA SCIENCE | 2018 - 2020

NETAJI SUBHAS INSTITUTE OF TECHNOLOGY (NSIT)

B.E IN ELECTRONICS AND COMMUNICATION ENGINEERING | 2012 - 2016

- Aggregate Percentage: 79.32%
- Merit Scholar from 2012-16

PUBLICATIONS

[1] KIRAN M, MURPHY P, MONGA I, DUGAN J AND BAVEJA S.S.
LAMBDA ARCHITECTURE FOR COST-EFFECTIVE BATCH AND SPEED BIG DATA PROCESSING. IEEE INTERNATIONAL CONFERENCE ON BIG DATA (BIG DATA), 2785 – 2792, OCT 2015

EXPERIENCE

ENERGY SCIENCES NETWORK | LAWRENCE BERKELEY NATIONAL LAB SOFTWARE ENGINEER

Aug 2016 - Present | June 2015 – Aug 2015 | Berkeley, CA

- Working on Open Source **Network Data Processing and Visualization Tools** (Pond.js [↗](#), Network Diagrams [↗](#), Timeseries Charts [↗](#))
- Developed a prototype tool for the **Google Cloud Network Analytics** project at ESnet to store, process and visualize large network data (~1 TB per year) [↗](#)
- Analyzed **InfluxDB**, a timeseries database and **Amazon Web Services (AWS)** for cost-effective batch and speed big data processing

CERN | EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

OPENLAB SUMMER STUDENT

June 2016 – Aug 2016 | Geneva, CH

- One of the 40 out of 1500 applicants chosen globally
- Assessed, evaluated and tested the capabilities and performance of Oracle Database 12c to store **CMS Experiment data** (~2 TB per year) in JSON Format
- Compared the performance with MongoDB [↗](#)

MULTIMEDIA RESEARCH LAB | GESTURE RECOGNITION USING MOMENTS

ADVISOR: DR. JYOTSNA SINGH

Aug 2015 – May 2016 | New Delhi, IN

- Using Background Subtraction, Feature Extraction and Classification, wrote an efficient algorithm for hand gesture recognition
- Achieved a 92% accuracy in detecting hand gestures without transformations and 89% with transformations
- **Languages Used:** Python, Matlab, OpenCV [↗](#)

BUZZ4HEALTH | A SMART PLATFORM FOR DOCTORS

MOBILE APP DEVELOPER

June 2014 – Nov 2014 | New Delhi, IN

- Built the first Android Version for the healthcare startup
- Featured in the **Top Free Medical Apps** on the Google Play Store
- Achieved a 100x user base growth within 3 months
- **Languages Used:** Backbone.js, PhoneGap [↗](#)