

Sartaj Singh Baveja

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SKILLS

PROGRAMMING

Python • Java • C++ • JavaScript
Scala • React • TypeScript
MySQL • MongoDB • InfluxDB

SERVICES

Google Cloud Platform • Flask
Amazon Web Services • Git
Unix Shell Scripting • Web API's

LINKS

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

COURSEWORK

Applied Machine Learning
Fundamentals of Data Engineering
Statistics for Data Science
Data Structures and Algorithms
Computer Systems Organization
Operating Systems
Software Engineering

OPEN SOURCE

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

MASTER OF INFORMATION AND DATA SCIENCE | 2018 - 2020 (EXPECTED)

NETAJI SUBHAS INSTITUTE OF TECHNOLOGY

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

- Aggregate Percentage: 79.32%
- Merit Scholar for all 4 years 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

May 2017 - Present | Aug 2016 - Feb 2017 | June 2015 – Aug 2015 | Berkeley, CA

- Assisting in the operational support and feature development for ESnet software and tools such as **OSCARs**, an advanced software system for booking time and resources on high-speed science networks to share vast amounts of data.
- Working on Open Source **Network Data Processing and Visualization Tools** (Pond.js ↗, Network Diagrams ↗, Timeseries Charts ↗)
- Worked on the development of a network analytics pipeline using the **Google Cloud Platform** to store, process and visualize large network data ↗
- 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 ↗

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