

SKILL SET

LANGUAGES **JavaScript** (Expert), **Java** (Proficient), **Python** (Proficient), **C++** (Functional)
WEB DEV **HTML5, CSS, SQL and NoSQL, React, Nodejs**
TOOLS **Git** (Expert), **Shell** (Proficient), **Vim** (Expert)

EDUCATION

JULY 2015	B. Tech, COMPUTER SCIENCE AND ENGINEERING, Indian Institute of Technology , Kanpur	9.6/10
JULY 2011	12 th Board, CBSE Board, The Emerald Heights International School , Indore	91.4%
JULY 2009	10 th Board, ICSE Board, The Laurels School International , Indore	95.4%

WORK EXPERIENCE

Co-founder & CTO JAN 2020 - PRESENT
ALLROUND.CLUB, Bangalore

Freelance Software Developer AUG 2019 - DEC 2019
Bangalore

Policy in Action Fellow (Bangalore 2019) JAN 2019 - FEB 2019
YOUNG LEADERS FOR ACTIVE CITIZENSHIP, YLAC

- Prepared a policy brief for an MP by having conversations with stakeholders and analyzing publicly available data on the topic.
- Understand the public policy landscape in Indian and learn about effective advocacy and sound policy making.

Associate, Systematic Market Making JAN 2019 - JUL 2019
GOLDMAN SACHS, Bangalore

- Worked on Principal Liquidity Provision and systematic internalizer (SI) for the MiFiD II regime.
- Develop the monitoring infrastructure of the team using a variant of the TICKstack (Telegram, Influx, Grafana, Kapacitor) to have visibility over a cluster of over hundred processes co-located with exchanges across the globe.
- Scaled Java backend on vertx3 to live stream upwards of 5 million positions and trades to a React frontend by snapshotting data.
- Analysed and improved performance regressions of multiple applications, 5x decrease on network congestion by coalescing packets on ZMQ running our Event Sourcing infrastructure.
- Optimized PnL computations in python to over 3 million position changes by efficient use of concurrency in python.

Analyst, Systematic Market Making DEC 2017 - DEC 2018
GOLDMAN SACHS, Bangalore

Analyst, Central Risk Book JUNE 2015 - NOV 2017
GOLDMAN SACHS, Bangalore

- Analyzed various unwind and RENTD strategies for pro-active risk management, according to the alpha profile of flow.
- Built a resilient reference data framework which computes static data and stores in memory. Reduced application warmup time from 2-3 hours to few minutes. Optimized cache buildup times 1000x.
- Designed a low latency block pricing REST service in Java and Vertx; dynamically adjusting quotes for volatility and volume in market. Reduced pricing time from few seconds to few milliseconds.
- Created a framework for realtime functional monitoring of processes using D3.js.
- Overhauled the UI/UX with a React/Redux based solution on the frontend and a Vertx3 based REST backend to bring our interfaces closer to the industry.
- Developed the end-to-end full-stack infrastructure for centralizing FX & Delta risk of internal desks, with a dynamic team working on a tech stack of Vertx, Java, React, Redux and proprietary systems.
- Generated an automated data certification and analytics framework which served as the gold standard for data driven policy decisions.

DevOps Engineering MAY - JUNE 2015
KLOZEE, Bangalore

- Automated developer operations by creating a heroku style push to deploy model on AWS, reducing development time.
- Worked full stack on Express, Angular, Node and Angular to create an apparel store for the web app.

Multi Factor Authentication in OpenVPN

MOZILLA WINTER OF SECURITY, Guillaume Destuynder, Professor Dheeraj Sanghi

2014 - 2015

[\[Wiki\]](#)

- One of the **eleven** teams all over the **world** to be selected as a part of Mozilla's Winter of Security Initiative 2014.
- The objective of the project was to implement true **arbitrary multi-factor authentication** support in **OpenVPN**; and to implement **session-support** for the additional factors.
- The project presentation is archived at <https://air.mozilla.org/mwos-2014-openvpn-mfa/>.
- The wiki for the project is located at https://wiki.mozilla.org/Security/Mentorships/MWoS/2014/OpenVPN_MFA

Research Intern

MICROSOFT RESEARCH INDIA, Bangalore

MAY-JULY 2014

- Analysed the implementations of different distributed systems and databases architectures like **Google MapReduce**, **Google FileSystem**, **Google MillWheel**, **Amazon DynamoDB**, **Apache Hadoop**, to understand the design decisions involved.
- Used **TPL Dataflow** and **Lightweight Tasks** to implement concurrent pipeline processing of messages in CScale to preserve processing order of partially ordered messages.
- Performed **performance testing**, **failure testing** of the existing infrastructure.

Software Development Intern

AURUS NETWORKS', Bangalore

MAY-JULY 2013

- Ported the legacy flash based web player in **CourseHub** – Aurus Networks' MOOC offering – to a technology agnostic **HTML5/JavaScript** web player leading to a uniform cross-platform viewing experience.
- Developed a **XMPP based real-time chat service** using Jabber framework, for conversations during live lectures.

INDEPENDENT PROJECTS

VS-3, Electronic Voting

Election Council, IIT Kanpur

WINTER 2014-2015

[\[GitHub\]](#)

- Designed and created a new electronic voting system in consultation with the **Students' Senate** to facilitate smooth electronic voting in the campus.
- The voting system was subsequently used in Students' Gymkhana General Elections, Hall 8 HEC Elections, Hall 2 HEC Elections and Hall 4 HEC Elections.

VANI - Voicing Archiving and Networking Information

Professor Manidra Agarwal, Professor T. V. Prabhakar

SUMMER 2012-2013

- Initiated the creation of VANI - an extensible community platform with applications for forums, wikis, search, lost and found and calendars.

AWARDS AND ACHIEVEMENTS

- 2011-2015 Students' **Gymkhana Leadership Award**, IIT Kanpur.
- JAN 2011 Kishore Vaigyanik Protsahan Yojana (**KVPY**) Fellowship
- DEC 2009 **CSIR Programme on Youth for Leadership in Science** held at Advanced Materials Research Institute, Bhopal
- 2014-2015 **Academic Excellence Award**, IIT Kanpur.
- 2014-2015 **Academic Excellence Award**, IIT Kanpur.
- 2012-2013 **Academic Excellence Award**, IIT Kanpur.
- 2011-2012 **Academic Excellence Award**, IIT Kanpur.

LEADERSHIP SKILLS

- Chief Election Officer, Election Council, IIT Kanpur 2014 - 2015
- Head, Major Events and Competitions, Antaragni '14 2014 - 2015
- Editor-in-chief, Vox Populi, the campus newsletter. 2013 - 2014

VOLUNTEER WORK

- Member, Institute Anti Ragging Committee 2014 - 2015
- Tutor, English Proficiency Programme, Professor Bhaskar Das Gupta 2013 - 2014
- Academic Mentor, Fundamentals of Computing, Professor Sumit Ganguly 2012 - 2013