

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

[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 - PRESENT

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](#) 2014 - 2015

MOZILLA WINTER OF SECURITY, Guillaume Destuynder, Professor Dheeraj Sanghi

[\[Wiki\]](#)

- 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

MAY-JULY 2014

MICROSOFT RESEARCH INDIA, Bangalore

- 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

MAY-JULY 2013

AURUS NETWORKS', Bangalore

- 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

WINTER 2014-2015

Election Council, IIT Kanpur

[\[GitHub\]](#)

- 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

SUMMER 2012-2013

Professor Manidra Agarwal, Professor T. V. Prabhakar

- 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