

EDUCATION

K.J. Somaiya College of Engineering

Mumbai, IN

*B.Tech. in Electronics and Telecommunication Engineering, GPA: 8.98/10**Aug 2019 – June 2023*

- **Concentrations:** Computer Networking & Cyber Security
- **Coursework:** Data Networking (Cisco Academy), Cyber Security & Ethical Hacking, Data Structures & Algorithms, Operating Systems, Real Time Operating Systems, Microprocessor And Microcontroller.

WORK EXPERIENCE

Famedly GmbH

Remote/Berlin, DE

*Software Engineer**May 2021 – Present*

- **Developed software for the German healthcare system**, focusing on secure communication between doctors, patients, and pharmacies using advanced cryptographic algorithms similar to libsignal.
- Integrated **voice and video calling features** using WebRTC and a secure communication layer for signaling.
- Currently involved in the integration of a **Selective Forwarding Unit (SFU)** to scale calls to over 200 participants and implement end-to-end encryption using modern APIs like insertable streams.
- Streamlined and improved the entire navigation system within the first month, **resolving more than 20 tickets simultaneously**.
- Contributed to the development of a new web application framework using pure Dart, implementing innovative **state management techniques and rendering optimizations**.
- Established **automated end-to-end testing for multiple projects** and resolved issues related to test flakiness.

INVOLVEMENT

CCEXtractor

Remote

*Volunteer**Dec 2018 – Present*

- **Google Summer of Code 2023, Mentor**, guided and supported emerging developers in the program while continuing the legacy of contributions to CCEXtractor.
- **Google Summer of Code 2021 Student**, developed a cross-platform desktop application for extracting subtitles from videos with diverse codecs and formats.
- **Google Code-In Finalist**, successfully competed with over 1500 students worldwide across diverse organizations. Accomplished over 25 tasks for CCEXtractor, utilizing a broad range of technologies including Python, Dart, and Rust. Notably, designed a live profiler for Python code, offering users insight into the execution sequence, variable states, and changes at each code step.
- **Migrated CCEXtractor's documentation from DokuWiki to Hugo and deployed it on Netlify**, enhancing accessibility and usability.

Matrix.org

Remote

*Volunteer**May 2022 – Sept 2022*

- **Google Summer of Code 2022, Student:** Collaborated on the flagship Matrix client, "FluffyChat", enhancing it with peer-to-peer calling capabilities and a rudimentary implementation of mesh calls.
- Volunteered at offline camps, notably the largest hacker camp, **Chaos Communication Camp**, a quadrennial event located in Berlin, Germany. Provided essential contributions to event organization and logistical support.

KJSCE Clubs

Mumbai, IN

*Volunteer**Sept 2019 – May 2022*

- **Google Developer Students Club Lead, 2020-2021:** Spearheaded the inaugural GDSC Club, conducting workshops and fostering collaborations with other college councils. Facilitated talks by industry professionals, including those from Google, to engage and inspire college students. Successfully secured sponsorships for major hackathons within the college through Google connections.
- **CodeCell Co-ordinator 2019-2020:** Among the top 3 students selected from the whole pool of first year students. Coordinated with faculty and external stakeholders to organize workshops, events, and competitions.
- **CodeCell Tech team member, 2020-2022:** Leveraged expertise in competitive programming to design problems for college-level competitions including collaborating and validating test cases. Contributed to the technical development of portals and websites for CodeCell and other college councils.

PROJECTS

- **B.Tech Final Year Group Project: “Neutrix”:** Created a privacy-focused social media platform built on the Matrix specification. Implemented audio and video calling capabilities and enabled interoperable messaging with platforms such as Signal, Telegram, and WhatsApp.
- **Warpspeed Hackathon Project: “Crossfire”:** Created a cutting-edge cross-chain bridge aggregator facilitating seamless asset transfers in a single click, earning top honors as the **winner of the CoinDCX track at the Warpspeed Hackathon.**
- **HackJaipur Hackathon Project: “CoronaXiv”:** Developed **award-winning CoronaXiv**, an ElasticSearch-driven AI Search Engine, recognized as the 'Best ElasticSearch-based Product' among 350+ teams nationwide at HackJaipur 2020. It indexes 60k+ research papers related to the global pandemic, aiding researchers in understanding and combatting the virus.
- **tldr pages client:** Designed and optimized simplified man pages for common Unix and other commands, resulting in a highly popular tldr.sh client used by thousands worldwide, accessible across multiple platforms including Android, iOS, web, Windows, macOS, and Linux.

HONORS & AWARDS

- **Global Rank 122 (2020):** at CTFtime.org, doing CTF competitions with team.
- **Battle of Vars:** Runner-Up, in the Coding Contest Battle of Vars, held at MIT Pune.
- **CodeWars 4.0:** Runner-Up, in the annual Competitive Programming Contest held within the college with more than 100 participants.

SKILLS

Languages: Dart, Kotlin, Python, Javascript, Rust

Technologies: Git, Flutter, WebRTC, Matrix, Node.js, Docker, Linux, CI/CD, HTML/CSS