

# Shubham Chopade

Portfolio: [shubhamchopade.com](https://shubhamchopade.com)

LinkedIn: [linkedin.com/in/shubham-chopade/](https://linkedin.com/in/shubham-chopade/)

Email: [shubhamchopade10@gmail.com](mailto:shubhamchopade10@gmail.com)

Mobile: 3159499067

## EDUCATION

- Syracuse University - College of Engineering & Computer Science** Syracuse, NY  
*Master of Science in Computer Science* August 2021 - May 2023  
*Courses:* Operating Systems, Computer Architecture, Design and Analysis Of Algorithms, Databases, Android Programming, Blockchain
- Savitribai Phule Pune University - Pimpri Chinchwad College of Engineering** Pune, India  
*Bachelor of Engineering in Electronics and Telecommunication* May 2015 - July 2019  
*Courses:* Data Structures and Algorithms, Operating Systems, Object Oriented Programming, Embedded Programming, Networking

## EXPERIENCE

- Syracuse University, Biology Department** Syracuse, NY  
*Full Stack Engineer (Part-time)* August 2022 - Present
  - D3 Simulations, Javascript Next.js:** Built a dashboard to analyze the population change as yeast mutualist and cheater reacts using D3.js based libraries. The data received in realtime is a result of using Server-Sent Events (SSE).
  - Python Backend, REST API:** Developed a FastAPI server for running CPU-intensive operations and is capable of handling multiple real-time EventSource requests. The user can also download the results after generation.
  - Deployed on AWS behind Nginx proxy:** The entire multi-threaded architecture is served by Amazon EC2 behind an Nginx proxy server, and the load balancer is used to manage HTTPS encrypted traffic.
- Viasat Inc.** Syracuse, NY  
*Software Engineer (Full-time, Intern)* May 2022 - August 2022
  - Grafana Dashboard:** Collaborated with the Enterprise Search team to evaluate the quality of Zoom call experience over satellite networks by ingesting data to Druid and visualizing using Grafana dashboards.
  - Automation using Raspberry Pi:** Conducted recurring Zoom meetings and performed testing utilizing Selenium and Python to produce and analyze metrics. Developed data pipelines that stored data over a Kafka topic and forwarded it to the production data lake.
  - Collaboration:** Monitored and troubleshot production issues related to the Kubernetes and Docker environment, implementing best practices and automating tasks to improve efficiency.
- Grouped Inc.** Syracuse, NY  
*Founding Frontend Engineer (Part-time)* January 2022 - May 2022
  - An App for Private Communities:** Built a production-ready MVP leveraging React NextJs social media low-code application with technical documentation that helps the social-media influencers to build close-knit groups.
  - Frontend and UI Mockups:** Developed a comprehensive UI design system for an enterprise using Figma and created over 20 reusable frontend components using Styled Components, Tailwind CSS, and MUI.
  - Backend:** Built a robust infrastructure to store data on AWS S3, and backend using TypeORM and NestJS (NodeJS) using collaborative efforts of 3 developers.
- Freelancer - Self Employed** Pune, India  
*Fullstack Developer (Full-time)* June 2019 - July 2021
  - Shipped projects:** Delivered well-documented full-stack web applications for remote clients in 3 countries using Javascript, Python, HTML, and CSS. Tested the UI components using Jest and Enzyme libraries.
  - Backend:** Implemented JWT tokens to secure REST API endpoints and ensure only authorized users have access to sensitive data.
  - Databases:** Designed and implemented robust, scalable database solutions using relational databases (e.g. MySQL, PostgreSQL) and NoSQL databases (e.g. MongoDB) to support business-critical applications.
  - Instagram Page:** Established a strong online presence through a business page on Instagram (@tech.sapien) with over 25,000 followers, sharing my professional journey and expertise.

## PROJECTS

- Self-Hosted and Managed Server (Home Server, Linux):** Working with setting up and maintaining home servers using technologies like Intel using Ubuntu to provide secure and reliable storage, hosting, and automation solutions (Present)
- Mutualisim - Agent-based modeling for Yeast (Micro-biology, Mutualism):** Created a simulator for examining the behavior of yeast under various environmental conditions, such as glucose and lysine, with the goal of educating school-aged children on microbiology concepts. Tech: Python, React, D3.js, Figma (Present)
- Sentiment Analysis using Twitter API (Web Application, Machine Learning):** Performed Sentiment Analysis over a month's cumulative data regarding COVID-19 booster dose to understand and scored it numerically from 0-10 in terms of positivity. Tech: Scikit Learn, Django, matplotlib (December 21)
- The Book Pundits (Web Application, Book Campaign platform):** This platform offers customized book tours and campaigns for your book. It allowed the authors to host book tours and the readers or influencers to review it on their own social media platforms to push it to a larger audience. Tech: React, Firebase, Javascript (January 21)

## SKILLS SUMMARY

- Languages:** JavaScript ES6, Typescript, Python, C/C++, Bash, Java, Kotlin, GraphQL, Node.js
- Frontend:** React, Angular, Redux, Next.js, Webpack, UI/UX, D3.js, JQuery, Tailwind CSS, WebRTC, Webpack
- Backend:** Nest.js, tRPC, Express.js, Django, Flask, FastAPI, JWT
- Cloud and Tools:** PostgreSQL, MySQL, SQLite, AWS, Azure, Firebase, GCP, Git, Figma