

# Shlok Desai

1402 Regent St, Madison, WI 53711 | +1 (608) 807-9991 | shlokdesai33@gmail.com | [LinkedIn](#) | [Github](#)

## EDUCATION

---

### UNIVERSITY OF WISCONSIN-MADISON

Bachelor of Science in Computer Science, Data Science, and Economics

Relevant Coursework: OOP, Operating Systems, Algorithms & Data Structures, Big Data, Distributed Systems, Intro to AI

Cumulative GPA: 3.9/4.0

Madison, WI

Expected May 2025

## WORK EXPERIENCE

---

### INFOSYS

Machine Learning Intern

Bangalore, India

Aug 2023 – Present

- Led a 5 member student team as the scrum master in a 3-month Agile project-style internship.
- Implemented and fine-tuned an advanced generative adversarial network (GAN) to recolor images in websites, thereby improving web accessibility for users with color vision deficiency.
- Curated a large data set comprising 6,000 ImageNet images transformed using multiple recoloring algorithms.

### CYFIRMA

Software Engineer Intern

Singapore

Jun 2022 – Aug 2022

- Collaborated with a seasoned security specialist in a mentoring capacity for 3 weeks, encompassing hands-on experience in forensic analysis, data gathering, digital risk assessment, and in-depth learning of fundamental cybersecurity principles.
- Spearheaded the development of a highly efficient microservice aimed at automating network scans (TCP & SYN), host detection, and ping sweeps. Project implementation resulted in a notable ~40% reduction in human labor hours.
- Single-handedly pioneered the entire microservice comprising roughly 1500 lines of Python code and Bash scripts.
- Integrated Apache Kafka into the project to enable message consumption and production within existing systems.

### PYEBOOK

Software Engineer Intern

Mumbai, India

Jun 2021 – Aug 2021

- Wrote SQL queries and implemented JWT authentication in a REST API with a small developer team.
- Achieved a substantial 20% reduction in the average response time of the REST API through the strategic implementation of MySQL indexes, query optimization, and server-level response caching.
- Leveraged React.js to design and develop UI components for the Pyebook web application. Expedited three new features and conducted rigorous unit tests using Jest.

## PROJECTS

---

### INSTRUMUS

- Harnessed technology to solve real-world problems, translating complex business needs into innovative technical solutions.
- Scaled a team of 2 members to 11, simultaneously generating an annual profitable turnover with no seed funding.
- Orchestrated the end-to-end development and deployment of two full-stack web applications, a custom design system built with React, as well as an automated email notification service, all deployed on AWS with Docker.

### CHATBOT FOR DEVELOPERS

- Employed TailwindCSS and React to craft a polished user interface that allows developers to make informed decisions about programming languages, frameworks/libraries. Dockerized the application for production.
- Scraped Github to construct a Neo4j graph database storing 10k+ nodes with 60k+ relationships, and wrote advanced graph algorithms, including an augmented TSP algorithm to generate tech stack recommendations.

### AI-POWERED NEWS SITE

- Spearheaded the development of the web app's frontend using Next.js, seamlessly blending SSR, CSR, and SSG, resulting in instantaneous page loads (~250ms) and a near-perfect Lighthouse score.
- Integrated Algolia to power a lightning-fast search functionality, and React Server Components to reduce the bundle size.

## ADDITIONAL

---

**Technical Skills:** C, Java, Javascript, Python, AWS, GCP, Git, SQL, RDBMS, MongoDB, Pytorch, Hadoop, Linux, Bash, Docker

**Awards:** 3x Hackathon Winner (MadData, MadHacks, HackUIowa); Dean's List (Spring 2022, Fall 2022, Spring 2023)

**Languages:** English (Native), Hindi and Gujarati (Fluent)