

SIMRAN CHAWLA

(857) 544-8410 | chawla.si.1996@gmail.com | [LinkedIn](#) | [Portfolio](#)

EDUCATION

NORTHEASTERN UNIVERSITY, College of Engineering

Master of Science in Computer Software Engineering

Related courses: Object Oriented Design, Web Development, Database design, Enterprise Software design, Algorithms

Boston, Massachusetts

Sep 2023 - August 2025

SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT

Bachelor of Engineering in Computer Science and Engineering

Related courses: Operating Systems, OOP, Databases, Web Development

Nagpur, India

2014 - 2018

TECHNICAL SKILLS

Languages: Java, Kotlin, Go, Python, HTML, CSS, JavaScript, SQL

Databases: MySQL, MongoDB, PostgreSQL

Frameworks/Libraries: Spring Boot, Vaadin, ReactJS, AJAX, Sass

Architectural Design: Orchestration, REST, Microservices, Monolith

DevOps & Cloud: Docker, AWS, TeamCity, Jenkins, Observability, Grafana

Middleware: Git, Github, Bitbucket, Apache Kafka, RabbitMQ, Backstage, Shell scripting

Practices: Agile, Scrum, Kanban, TDD, Clean code, CI/CD, Unit testing, Pair programming, JUnit

WORK EXPERIENCE

PFIZER

Groton, CT, USA

Pharmaceutical Research & Development | Software Engineering Coop

May 2024 - December 2024

- **Reduced** laboratory experimentation requirements by **40%** by implementing **AI/ML algorithms** (Bayesian, Dynamic Optimization, Dragonfly)
- Saved **40+ engineering hrs** by developing Vue.js-based(ipyVuetify) UI enabling chemical engineers to run backend algorithms independently
- Improved research continuity by managing experimental data through MySQL, ensuring reliable storage & accessibility

THOUGHTWORKS TECHNOLOGIES

Pune, India

Lastminute - European travel tech company | Backend developer

April 2021 - August 2023

- Architected centralized database solution to address client challenges with disparate data sources, improving operational efficiency & cross-product data consistency using **Java**
- Boosted data management efficiency by **30%** through custom back-office application built with Vaadin framework
- Integrated Grafana for monitoring, configured Slack alerts to notify team, ensuring **99.9%** uptime for distributed system
- Pioneered AI integration strategy utilizing ChatGPT, MidJourney APIs to enhance user experience, including dynamic Instagram post creation

Axis Bank - Retail banking | FullStack developer

- Modernized consumer-facing UIs & backend systems for credit cards & loans ensuring production readiness with robust monitoring
- Unified loan products(home, auto, personal, credit cards) into single orchestrated workflow improving the customer experience
- Reduced code maintenance cost by **40%** by implementing a cross-platform step framework enabling centralized updates
- Promoted clean code & TDD with Mockito, achieving **92%** test coverage
- Strengthened team quality by conducting 40+ technical interviews & assessments, enabling recruiters to identify top talent
- Conducted impactful technical sessions on React, advance styling & TDD best practices for community enrichment

AYOCONNECT TECHNOLOGIES PVT LTD

Pune, India

Software Engineer - Backend

September 2020 - April 2021

- Integrated service providers to unified API platform of online bill payment handling **500K transactions** daily
- Improved system modularity by integrating 4 service providers through dedicated micro-services in Go
- Enhanced reliability & scalability as measured by successful decoupling, by migrating 2 billers from monolith to monitored microservices

ZS ASSOCIATES

Pune, India

Software Engineer

September 2018 - September 2020

- Accelerated decision-making by **25%** reducing reporting time by building role-based data visualization on Pharma sales planning & compensation platform
- Increased testing efficiency by **40%** implementing automation framework using Selenium, Cucumber
- Enhanced team delivery timelines by on-time project completion and mentoring 3 software engineers

PROJECTS

URL Shortener Serverless Application [AWS DynamoDB, AWS Lambda, AWS API gateway, HTML, JavaScript]

- Developed utilizing DynamoDB for storage, Lambda functions for CRUD operations, and API Gateway for RESTful endpoints
- Designed a user-friendly HTML interface with JavaScript for URL submission and redirection hosted on AWS public cloud

Video Advertisement Intelligent Analyzer [Python, OpenCV, PyTesseract, TensorFlow, PyTorch]

- Achieved 85% F1 score by engineering a multimodal LLM classifier integrated video, speech, & text data
- Attained 90% human-evaluator alignment by implementing a video intelligence system processing 150 advertisements