

# GAURAV RAKESH SINHA

Boston, MA | 857-398-3073 | [sinha.g@northeastern.edu](mailto:sinha.g@northeastern.edu) | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

## Education

### Northeastern University

Boston, MA

Master of Science in Software Engineering Systems

Sep 2023 - May 2025

### Mumbai University

Mumbai, India

Bachelor of Engineering in Electronics and Telecommunication

Aug 2017 - Jun 2021

## Skills

**Programming Languages:** JavaScript, TypeScript, Java, Python, SQL, C++

**Web Technologies:** ReactJS, jQuery, HTML, CSS, SCSS, REST API, JSON, OAuth 2.0, Tailwind CSS

**Frameworks / Databases:** Node.js, Next.js, Redux, Flask, Redis, Elasticsearch, MongoDB, PostgreSQL

**Development Practices:** Agile/Scrum, CI/CD, Unit Testing, Kanban, TDD, Git, Docker, Kubernetes (k8s), RabbitMQ, AWS

**Operating Systems / Tools:** Linux (Ubuntu, CentOS), Windows, Microsoft Office Suite, Android Studio, Postman

## Work Experience

### Tata Consultancy Services

Mumbai, India

Software Engineer

Aug 2022 - Jul 2023

- Architected responsive and user-friendly front-end interfaces for Croma's e-commerce website using **React**, JavaScript, and AJAX, increasing **website engagement by 25%**
- Delivered projects using Agile methodology, collaborating effectively with cross-functional teams to meet sprint goals
- Utilized **Docker** for containerization, ensuring consistent development environments and streamlining the deployment process
- Developed and integrated a personalized product recommendation engine using React, Spring Boot, and **MongoDB**, resulting in a 25% increase in sales and a 20% improvement in user engagement
- Enhanced product discovery by incorporating advanced search and lazy loading, driving a **15% increase in conversion rates**
- Managed offshore teams, led code reviews, and conducted sprint demos to ensure seamless project coordination and delivery

Associate Software Engineer

Jul 2021 - Jul 2022

- Crafted a comprehensive web dashboard for Croma's business users using React and **Redux**, boosting operational efficiency
- Identified and rectified front-end issues through thorough **unit testing**, enhancing overall quality assurance by 30%
- Developed and maintained a suite of automated tests using Test-Driven Development (TDD) methodologies to ensure code reliability and stability, resulting in a **70% decrease in production bugs**
- Demonstrated proficiency in all phases of the software development lifecycle (**SDLC**), from system design to operational stability
- Employed **Axios** for efficient API requests and error handling, leading to a 10% reduction in page load times
- Applied Object-Oriented Programming (**OOP**) principles while practicing clean and efficient coding methods, maintaining strong documentation standards, and contributing to best practices in software development methodologies

## Projects

### Present

(Next.js, Redux, React DND, REST APIs, MongoDB, TypeScript, Tailwind CSS)

- Created a web application using **Next.js**, enabling users to design and share custom animation-based presentations
- Enhanced application performance with Redux for streamlined storage of element states
- Implemented **server-side rendering** to enhance data fetching and initial page load speeds for presentation and user profiles

### **Sentiment Analysis Application**

(React, Flask, Spring Boot, Docker, Terraform, AWS EKS)

- Designed a Flask microservice to analyze sentiment polarity of sentences using TextBlob, returning results to the frontend
- Deployed the application in a containerized environment with **Nginx** as the web server, and used **EKS** to manage containers
- Implemented REST API endpoints with Spring Boot to handle HTTP request, functioning as a bastion server with JWT security

### **Tweet Hub**

(React, Python Flask, Redis, AWS)

- Developed a web application for publishing tweets, monitoring Twitter feeds, and managing user authentication using **JWT**
- Implemented **RESTful API** endpoints with Flask to facilitate real-time tweet posting, integrating seamlessly with the frontend
- Utilized **AWS** ECS and ECR for deploying containerized backend services, ensuring scalable cloud-based operations, and leveraged AWS CodeBuild to streamline the **CI/CD pipeline**