# SHIVAM SINGH

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#### **Education**

Northeastern University, Boston

Sep 2024 - May 2026

• MS in Computer Science

University of Mumbai, India

Jul 2016 - May 2020

Bachelor of Engineering (Electronics and Telecommunication Engineering)

#### Chille

Programming Languages: Java, Python, JavaScript, TypeScript, C++, HTML, CSS, SQL, T-Sql Distributed Technologies: AWS, Azure, Docker, Kubernetes, Nginx, Tomcat, RabbitMq, Apache Kafka Frameworks & Libraries: Node.js, Express.js, ReactJS, jQuery, Angular, Spring MVC, SpringBoot, Mockito

Databases: Oracle DB, MySql, MongoDB (NoSQL)

Software Development: Git, Jira, Bitbucket, Github, Jenkins, Shell Scripting (Linux, Bash), Maven, Gradle, Ansible, Postman

### **Work Experience**

#### Tata Consultancy Services | Software Developer

Apr 2022 - Aug 2024

- Designed and Developed modern, high-performing websites using Next.js, improving performances by leveraging server-side rendering (SSR) and static site generation (SSG).
- Pioneered the development of dynamic, highly interactive UI components using Angular integrated with robust Spring Boot microservices, achieving a 25% boost in user engagement and a 20% reduction in feature rollout timelines across critical projects.
- Designed and implemented scalable machine learning pipelines for text classification and information retrieval, significantly reducing data processing time by 15% while consistently maintaining model accuracy above 95%, even for large and complex datasets.
- Reduced Docker image sizes by an impressive 90% through advanced build optimizations, resource allocation strategies, and automation, enabling faster container deployments and significantly enhancing overall system responsiveness and performance.
- Designed and deployed a machine learning pipeline leveraging NLP techniques, achieving 95% accuracy in classifying unstructured text data for sentiment analysis and topic categorization.

#### Tata Consultancy Services | Software Developer

Dec 2021 - Mar 2022

- Built and deployed high-performing backend solutions using Spring MVC and REST APIs, ensuring system uptime of 99.9% while reducing API response times by 20% and efficiently supporting over 100K+ daily active users with seamless performance.
- Designed, developed, and optimized T-SQL queries to streamline database operations across multi-terabyte datasets, decreasing query execution times by 25% and improving system responsiveness and scalability for high-volume transactions.
- Conceptualized and developed feature-rich, high-performance web and mobile applications, achieving a measurable 10% increase in user satisfaction by implementing optimized database queries and advanced intelligent caching strategies leveraging MySQL.
- Integrated robust SSL authentication and role-based access control (RBAC) within an SOA architecture, reducing vulnerabilities by 40% and enhancing user trust for critical financial applications.
- Collaborated effectively with a cross-functional team of 4 engineers and designers using Agile methodologies, delivering critical project milestones 10% ahead of schedule while maintaining superior code quality and alignment with user requirements.

#### Larsen & Toubro Infotech | Graduate Engineer Trainee

Aug 2020 - Apr 2021

- Developed a text analytics platform leveraging GPT-based LLMs, automating categorization tasks and improving efficiency by 60%.
- Increased web application usability by 15% by designing interactive UI components with Angular, improving user satisfaction.
- Developed highly responsive and feature-rich web applications using Angular and JavaScript, efficiently supporting 100K+ concurrent users and achieving an exceptional 99.8% uptime across distributed systems with seamless and robust cross-platform functionality.
- Diminished data retrieval time by 25% by optimizing database queries and implementing caching strategies in MySQL.
- Reduced data retrieval time by 25% through Redis caching and query optimization for high-volume databases.

#### **Projects**

## Financial Portfolio Manager:

- Created a robust web-based application for portfolio tracking using Java, Spring Boot, and Angular, enhancing user experience and increasing portfolio visibility by 40% through real-time updates, advanced analytics, and seamless cross-platform compatibility.
- Utilized AWS for cloud storage and secure processing, achieving 99.9% uptime and reducing hosting costs by 15%.
- Integrated real-time data feeds using RESTful APIs, ensuring highly accurate and consistently up-to-date financial information.

## Kanbas:

- Designed an interactive React-based UI with drag-and-drop functionality for task boards, improving organization efficiency by 35%.
- Implemented real-time task and comment updates via WebSockets, increasing team collaboration efficiency by 35% across teams.
- Built secure user authentication and role-based access control with Node is and JWT, safeguarding project data.