# **Avijeet Shil**

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#### EDUCATION

MS in Computer Science, University of North Texas, TX(Expected Dec 2025).

## **Professional Experience**

### Graduate Teaching Assistant University of North Texas

08/2023-Present

• Led and managed 25 senior-year projects with 92% on-time completion rate, overseeing 125+ students and achieving 85% project requirements fulfillment across 4 sprints.

Monitored sprint progress with **bi-weekly** feedback sessions, resulting in **88**% sprint completion rate and reducing blockers by **65**% (from 12 to 4 blockers per sprint).

 Implemented Agile methodologies that resulted in a 70% enhancement of project outcomes; reduced delivery time from 10 weeks to just 6 weeks while increasing overall code quality scores of source code from 65% to an impressive 89%.

• Mentored 50+ graduate students on LLM(GPT) applications, achieving 60% improvement in test coverage (from 45% to 72%) and reducing deployment errors by 85%.

# Software Engineer, Recurrent Payment Vivasoft Limited

11/2022-07/2023

• Designed a Custom API Ratelimiter, generic CPS TPS API, boosting 1K+ TPS for individual payment types.

Built and configured Spring Security for the Gateway API for 4 microservices focused for large user bases.

 Restructured Admin Portal UI and backend using front-end library Vue.js and TypeScript, resulting in a 40% reduction in response time, a 25% increase in data processing capacity and 200+ less code by introducing generic RESTful APIs.

• Executed comprehensive documentation strategies detailing APIs used internally for better onboarding practices—this led directly into training sessions attended by over **10** new engineers within 3 months of cross-functional team.

### Software Engineer, E-Governance Reve Systems

06/2021-10/2022

• Orchestrated end-to-end automation of Report Management System, processing **500+** daily reports with **99.9**% accuracy and reducing report generation time by **85**% (from **45** minutes to **7** minutes).

Spearheaded Venue Booking System development handling 200+ daily bookings with 75% workload reduction, improving template generation speed from 15 minutes to 3.5 minutes.

• Engineered NLP-based Duplicate Question Checker processing **2,000+** questions with **98%** accuracy and **150ms** average response time, supporting **50+** concurrent users.

• Implemented Role-based Notification System managing 13 approval workflows with 99.5% delivery rate, handling 1000+ daily notifications across 39 committees.

#### **SELECTED PROJECTS**

## Meet-me-in-the-middle-Next.js, TypeScript, Firebase

• Built a **Manage Friends** feature handling **2000+** active connections with **99.8**% successful friend requests processing and reduced connection setup time by **65**% (from 45s to 16s).

Integrated Location Approval system processing 500+ daily location sharing requests with 100% privacy compliance, achieving 95% user satisfaction rate based on feedback.

• Developed travel logging feature reducing data retrieval time by **75**% (from 20 minutes to 5 minutes per session) and handling **10,000+** trip records monthly with **99.9**% data accuracy.

Leveraged **Firebase** to manage **15,000+** user profiles with real-time updates, maintaining **<100ms** data sync latency and **50MB** average storage per user.

• Integrated **Google Maps API** achieving **98**% location accuracy within **5 meters**, processing **1000**+ daily geocoding requests with **99.5**% successful mapping rate

## FoodEx-Express.js, Nodejs, Mongodb, Axios

Developed a robust backend with Node.js and Express that handled 500+ daily HTTP requests with 99.9% uptime, reducing response time by 40% (from 300 ms to 180 ms).

Utilized Axios for asynchronous HTTP requests, achieving 98% successful CRUD operations across 15 RESTful API endpoints with average response time of 120ms.

• Leveraged **MongoDB** to manage **25,000+** user profiles and **5,000+** restaurant menu items, improving data retrieval speed by **60%** and reducing database query time from **2s** to **800ms**.

#### Skills

• Languages: Java, Python, Go, C++, Javascript, TypeScript

- Technologies: Webpack, SQL, MySQL, Postgres, Mongodb, Git, Docker, Kubernetes, Linux, RabbitMQ, Redis
- API Development: REST APIs, GraphQL
- Cloud Services: AWS, Azure, GCP
- Frontend Libraries: Next.js, React.js, Vue.js, Redux,, Angular.js

• Backend Frameworks: Node.js, Spring, Flask, Django

- Soft Skills: Leadership, Teamwork, Communication, Drive and Initiative, Analytical and Problem-Solving
- Core Skills: Object Oriented Design, Distributed Programming, Data Structures, NLP, Software Architecture

#### **Certifications**

- Software Engineer Certificate HackerRank
- Frontend Developer (React) Certificate HackerRank
- Problem Solving (Intermediate) <u>HackerRank</u>
- Rest API (Intermediate) <u>HackerRank</u>