Hetan Thakkar

857-200-8726 | thakkar.heta@northeastern.edu | LinkedIn | Portfolio | Boston, MA

EDUCATION

Master of Science in Computer Science | Northeastern UniversitySep. 2023 – May. 2025Coursework: Algorithms and Data Structure, Object-Oriented Programming, Cloud ComputingGPA: 3.5/4.0Bachelor of Engineering in Computer Engineering | Gujarat Technological UniversityAug. 2018 – May. 2022Coursework: Distributed Systems, Database Management Systems, Machine LearningGPA: 3.5/4.0

EXPERIENCE

Graduate Teaching Assistant *Graphics Portfolio*

Sep. 2023 - Dec. 2023

Northeastern University | Computer Graphics, C++, OpenGL

Boston, MA

- Led weekly C++ sessions on shader programming, memory management focusing on low-level memory management.
- Created hands-on teaching projects that improved learning outcomes for 120+ students:
 - o 3D Object Renderer: **Set up core graphics pipeline** (wireframe → shading → transformations)
 - Added interactive camera controls, shadows, normal mapping and texture support using OpenGL/SDL2

Software Development Engineer

Jul. 2022 - Jul. 2023

Zoyride | Java, Spring Boot, AWS, SQL, React, Docker, Jenkins

Gurugram, India

- Spearheaded and deployed a **web-based platform** for ride booking and fleet management supporting 10K+ daily users using Agile Software Development Life Cycle Model.
- Delivered Spring Boot microservices with SQL queries for ride-sharing and cost-splitting, boosting revenue by 10%
- Wrote automated tests for carpool functionality using Mockito and JUnit achieving 90% test coverage
- Containerized microservices with Docker using multi-stage builds, reducing image size from 2GB to 850MB
- Engineered **CI/CD pipelines**(Jenkins), reducing deployment time to 15 minutes and streamlining the release process

Software Engineering Intern

May. 2022 - Jul. 2022

Zoyride | React, Typescript, Express.js, MongoDB, Git

Gurugram, India

- Enabled real-time ride status updates with WebSocket for instant ride progress and ETA notifications
- Cut down API costs by \$1,000/month by implementing custom curved polyline algorithms in Google Maps
- Integrated Stripe payment gateway, enhancing transaction reliability and reducing payment failures by 30%

Software Development Intern 2

Feb. 2020 - Jun. 2020

Bytefury Inc. | C#, ASP.NET, TypeScript, React, Redis, AWS, Git

Bangalore, India

- Reduced invoice creation time by 9% through UI revamp with modern UX principles and updated React components
- Developed payment APIs in ASP.NET adding support for 15 currencies, driving over 3,000 new app downloads
- Used Redis for **caching complex invoice calculations**, cutting average response time from 2.5 seconds to 800ms

OPEN SOURCE CONTRIBUTIONS & ACHIEVEMENTS

Meta, Microsoft & Elastic | Java, Android, iOS □

May. 2021 – Jul. 2021

- Meta(React): Fixed rendering bugs and added Form Data support for file uploads, benefiting over 100K developers
- Microsoft(FluentUI): Fixed critical DatePicker bug preventing website crashes for Microsoft 365 platform and enhanced WCAG compliance across 5 UI components enhancing accessibility for FluentUI users
- Fixed critical bugs, earning a \$300 bounty for contributions in the React Native Elements library (1M downloads)
- Earned AWS Cloud Architect Certification, designing scalable solutions using EC2, S3, RDS & DynamoDB

PROJECTS

Resume Verification Tool for Recruiters | *Python, React Native* □

May. 2024 - Present

- Created a resume verification app using Python and NLP to extract and validate data from PDF resumes
- Web-scraped and processed GitHub and LinkedIn to analyze developers' professional history and code contribution
- Achieved a 90% reduction in resume parsing time decreasing the process from 10 minutes to 1 minute

Peer-to-Peer File Transfer System | Java, Multithreading, TCP/IP □

Sep. 2023 - May. 2024

- Built a serverless P2P file transfer app in Java, supporting 300 users and up to 10,000 transfers per hour
- Incorporated parallel upload/download, prioritized seeding and employed a rarest piece first strategy
- Implemented handshake and message protocol, including choke, unchoke, and interested message types

SKILLS

LanguagesJava, Python, Go, JavaScript, TypeScript, C++, C#, HTML5/CSS3FrameworksReact, Node.js, Spring Boot, ASP.NET, Express.js, Redis, Selenium, JUnitDeveloper ToolsSQL (PostgreSQL, MySQL), MongoDB, AWS, Docker, Kubernetes, WebSocket