# **Hetan Thakkar**

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#### **EDUCATION**

## **Northeastern University**

Sept 2023 - May 2025

Master of Science in Computer Science | Massachusetts, USA

Courses: Distributed Systems, Data Structures & Algorithms, Object Oriented Programming

# **Gujarat Technological University**

Aug 2018 - May 2022

Bachelor of Engineering in Computer Engineering | Gujarat, India | GPA: 8.74/10.0

Courses: Operating Systems, Machine Learning, Computer Networks, Database Management System

#### **EXPERIENCE**

#### **Graduate Teaching Assistant | Northeastern University**

September 2023 - December 2023

- Assisted and graded C++ and OpenGL assignments, exams, and projects for the professor.
- Led code review sessions, office hours and provided solutions for the computer graphics course.

## Software Engineer | Zoyride

July 2022 - July 2023

- Developed patient management microservices using Spring Boot, implementing REST APIs to extract key
  modules from a legacy monolith architecture and deployed the application on AWS using Elastic Beanstalk.
- Developed use case diagrams and designed database tables, providing mapping between relational database tables and object-oriented Java objects using Hibernate.
- Implemented containerization with Docker and orchestration with Kubernetes in an Agile environment, reducing deployment time from 45 minutes to 30 minutes and **improving overall deployment efficiency by 33%**.

## Software Developer Intern | Ripen Labs

May 2022 - July 2022

- Refactored invoice and authentication components for one of their products from NodeJS to GoLang, implementing RESTful APIs with Gin framework, resulting in a 30% reduction in average response time for invoice processing endpoints.
- Developed a modular **payment gateway** integration system in **Golang**, supporting multiple providers and wrote comprehensive unit and integration tests using the Go testing package, achieving **85% code coverage**.

## **Software Engineering Intern | Bytefury**

February 2020 – June 2020

- **Saved about \$1000 monthly** by incorporating a curved polyline algorithm into Google Maps, eliminating reliance on Google's Direction Polyline API and improving the app's visual appeal.
- **Decreased the app size by 20%** by migrating to the new Hermes architecture and using vanilla react native instead of Expo for the cross-platform mobile app that helps adults manage health, finance and work.

## **ACHIEVEMENTS & PROJECTS**

## Meta, Microsoft and Elastic | Open Source Contributor 2

May 2021

- Critical Bug Fix: Resolved a critical interaction bug in React Native Buttons, impacting 50 million weekly users.
- Performance Optimization: Optimized the Slider component, boosting page load speed by 40%.
- Code Quality Improvement: Resolved over 50 TypeScript errors in the codebase.
- Feature Addition: Implemented text-transform feature and fixed render bugs in the UI Table component.
- **Recognition: Received \$200** appreciation bonus for bug fixes and performance improvements.

# SSIP Hackathon | Winner 🛂

September 2020

- Developed a **job recommendation system** using Python, implementing TensorFlow for model training and scikit-learn for feature extraction from resume text data.
- Leveraged BERT (Bidirectional Encoder Representations from Transformers) for advanced contextual embedding of job descriptions and candidate resumes, resulting in a 35% improvement in recommendation relevance compared to traditional keyword matching methods.

## Distributed P2P-FileSync 🖸

January 2024

- Created a **P2P serverless file transfer app in Java**, utilizing multithreading and socket programming.
- Implemented parallel upload/download, prioritized seeding, and rarest piece first strategy, ensuring scalability to support 300 simultaneous users and enhancing network efficiency and fault tolerance through multi-threaded TCP socket communication.

## **SKILLS**

- **Programming Languages:** Java, Golang, Python, C++, Javascript
- Backend & Cloud: Spring Boot, MongoDB, SQL (PostgreSQL, MySQL), Redis, AWS (EC2, S3, RDS, ECR), Docker
- Technologies/Frameworks: Machine Learning, TensorFlow, ReactJS, OpenGL, Linux, Git