HET PATEL

Boston, MA | patel.hetas@northeastern.edu | 857-544-9003 | Linkedin | Github | Portfolio

Education

Northeastern University, Boston, MA

Expected May 2025

Master of Science in Information Systems

Relevant Coursework: Application Engineering and Development, User Experience Design and Testing, Web Development, Database Management and Design

Gujarat Technological University, Gujarat, India

Aug 2016 - Jun 2020

Bachelor of Engineering in Computer Engineering

Relevant Coursework: Object Oriented Programming, Data Structures and Algorithms, Programming with C++, Python Programming, Compliers, Digital Electronics

Technical Skills

Programming Languages: C++14/17/20, Python, Java, JavaScript, TypeScript, SQL

Full Stack Web Technology: NodeJS, HTML, CSS, SASS/SCSS, ReactJS, Redux, NextJS, GraphQL Database Technology and ORM: MySQL, PostgreSQL, MongoDB, DynamoDB, Elasticsearch, Redis

Version Control & DevOps: Git, GitLab CI, AWS(Lambda, S3), Docker

Test Automation & Other Tools: Selenium, Mocha, Jest, Postman, Visual Studio Code, Swagger, JIRA

Work Experience

Silver Webbuzz Private Limited

Sept 2021 - May 2023

Software Engineer

India

- Built a robust GraphQL schema in Next.js app, using normalization & efficient resolvers for optimal data management
- Created e-procurement site with 150+ CRUD operations and incorporating JWT for secure, role-based access
- Spearheaded Selenium and Mocha automated testing, boosting code coverage to 75%, improving software reliability
- Engineered a scalable NodeJs application with MVC and microservices patterns, leveraging containerization through Docker and enhancing CI/CD workflows with Jenkins for efficient deployment.
- Integrated Elasticsearch with NodeJS and MongoDB application using REST APIs, elevating search response by 40%
- Utilized Python and OpenAI API to automate patient data extraction from PDFs, reducing manual data entry by 65%

ShineStar Web Solutions

Dec 2019 - Apr 2020

Software Developer Intern

India

- Modernized React web applications with Material UI for a user-friendly and responsive design
- Employed custom React hooks, decreasing code duplication by 60% and accelerating feature development by 30%
- Refined MongoDB indexing with compound indexes and optimized query plans, reducing API response times by 500ms
- Catalyzed efficient project delivery and team workflow improvements through collaborative Agile sprints and stand-ups.

Projects

Serverless Media Organizer | NodeJS, AWS Lambda, AWS S3, Github Actions, Typescript

- Designed a serverless media file processing solution with NodeJS and Lambda, minimizing processing latency by 50% and boosting file organization efficiency by 70%
- Implemented custom Lambda functions for smart media file categorization through content and metadata analysis
- Configured GitHub Actions with AWS SNS for continuous integration and real-time deployment alerts

Airplane Management System | Java Swing, MongoDB, Google Maps API

- Built a Java Swing Airline Management System with MongoDB, enabling multi-user role-based access for effective workflow management
- Leveraged MongoDB for data handling, resulting in robust data integrity and 40% increase in transaction processing
- Enhanced the System with Google Maps API for real-time flight tracking, improving operational awareness and safety

Waste Disposal Management | C++, ReactJS, NodeJS, Ant Design, Firebase, Arduino

- Engineered a waste collection scheduler using the Traveling Salesman Problem (TSP) algorithm, achieving a 70% improvement in resource allocation.
- Revamped the waste management dashboard using ReactJS, enhancing accessibility and real-time data visualization
- Authored NodeJS analytics module utilizing Firebase and Arduino IoT data, enhancing waste collection route efficiency
- Crafted a C++ algorithm for real-time waste level monitoring, boosting collection scheduling efficiency by 25%