VATSAL PATEL

Flemington, NJ | (201) 492-7991 | vatsal1381@gmail.com | Personal Website | GitHub

EDUCATION

| Stevens Institute of Technology | USA |
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| Master of Science, Computer Science, GPA: 3.96 | May 2024 |
| Coursework: Data Structures & Algorithms, Web Programming, Human Computer Interaction, Software Engineering | |
| Charotar University of Science and Technology | India |
| Bachelor of Technology, Computer Engineering, GPA: 3.92 | May 2022 |
| Coursework: Object-Oriented Programming, Operating System, Database Management, Cloud Computing | |

TECHNICAL SKILLS

- Languages: Python, Swift, SwiftUI, Java, JavaScript, HTML5, CSS, TypeScript, Go, C++, GraphQL
- Dev Tools: Git, Docker, Jenkins, Bitbucket, Vercel, AWS(S3, EC2, Lambda), Redux, Gulp, Kafka, Kubernetes, Terraform
- Frameworks & Libraries: Cocopods, TailwindCSS, Django, Node.js, React.js, Next.js, Vue.js, Express.js, D3.js, Angular
- Databases: NoSQL (MongoDB, DynamoDB, Cloud Firestore), SQL (MySQL, PostgreSQL), Redis
- Certifications: iOS & Swift App Development Bootcamp from Udemy

EXPERIENCE

Co-Founder, Trionic Technologies LLP. | India

- Catalyzed 20% growth in SaaS sector; worked with developers, excelled in client relations & project management
- Managed development of spindle monitoring system; designed system architecture with Go, MQTT, Kafka, AWS EC2, processing 1M+ data points/second; optimized with Agile and Kanban for faster, efficient delivery

Software Engineer Intern - iOS, Esri | USA

- Delivered 10% performance/reliability improvement for "Field Maps" iOS app, leading to 6.6M downloads, used Swift 5 and SwiftUI, and utilized Scrum methodology
- Pioneered Swift's first UI automation tests, boosting testing efficiency; leveraged ArcGIS SDK for geospatial features
- Expanded Swift automation tests for 20% quicker bug detection, enhancing reliability, and user experience

SES Student Software Developer, Stevens Institute of Technology | USA

- Crafted robot movement tracking web app with D3, React, Node-Red, DynamoDB, LiDAR sensors, aiding 1.5K+ students
- Created microservices based software to convert real-time sensor data into graphs, uplifting mechanical lab's efficiency

UI/UX Developer Intern, Aavatto LLP. | India

- Revamped UI for over 6 mobile and web apps, working in cross-functional teams with tech-leads and engineers
- Accelerated user flow by 35%; created wireframes and UX concepts like task analysis, storyboards, and use cases
- Achieved a 92% favorable rating from clients by driving technology solutions that met specific business objectives

Full Stack Developer Intern, Techosoft (Remote) | Australia

- Boosted web responsiveness by frontend development, elevating UI/UX design and increasing user engagement by 20%.
- Elevated overall user experience by 40%, merging front-end code with backend logic and graphic components.
- Optimized website load time by 30% through code optimization, caching, and debugging for performance and reliability.

PROJECTS

Stevens Lost and Found (*Node.js, Express.js, MongoDB, Handlebars, Bootstrap CSS, GitHub*)

- Devised and deployed a web app for lost item reports and retrieval, reducing misplaced items reports on campus by 25%
- Drove 40%+ engagement at university through a user-friendly interface, efficiently handling weekly item recoveries

LearnLab – E-learning platform (React.js, Tailwind CSS, Material UI, Google Cloud Firebase, Netlify, Bitbucket)

- Built an e-learning platform, providing customized modules in coding, design, and IT skills for students and professionals
- Designed UI for 20% higher user retention, adhering to tota11y guidelines, and including features like video resumption

Synth – Music Streaming Service (Node.js, Express.js, Next.js, Tailwind CSS, Cloud Firebase, Redis, Vercel)

- Engineered a web-based music streaming platform with Spotify API integration, featuring curated playlists, track discovery, artist insights, and robust user profile management
- Improved platform performance by 40% using Vercel for CI/CD, Redis for server-side caching, and Google Cloud.

Augmented Reality Image Tracking iOS App (Swift, Scenekit, ARkit, Ulkit, AVFoundation)

 Innovated an immersive iOS app using ARKit, SceneKit, and AVFoundation, enhancing augmented reality interaction by 30% with seamless image tracking and dynamically scaling HD videos.

Dec 2021 – Apr 2022

May 2021 – Aug 2021

Jan 2023 – May 2023

Aug 2021 – Present

May 2023 – Dec 2023