### Vrushank Hiremath

Software Engineer

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#### Summary

Dynamic **Software Engineer** with a strong foundation in building scalable, AI-integrated applications using React, Next.js, Node.js, and Java. Adept at developing secure, high-performance systems with a focus on system design, SDK development, and cloud-native architecture. Proven experience in designing RESTful APIs, integrating GenAI features, and deploying microservices across distributed infrastructures. Skilled in optimizing CI/CD pipelines, implementing end-to-end security, and delivering intuitive, responsive user interfaces.

Work experience

## **KeelWorks Foundation, Boston, MA**Software Engineer

2024-02 - 2025-02

- Architected robust **RESTful APIs** using **Node.js** to seamlessly retrieve and integrate AI-driven data, improving backend throughput and reducing request latency by over 25%
- Constructed reusable SDKs and modular UI libraries using **React**, **Next.js**, and **Java Spring Boot**, streamlining the integration of **GenAI** capabilities across multiple internal teams and external clients
- Delivered high-performance server-rendered dashboards utilizing Next.js features such as SSR and SSG, which enhanced SEO ranking
  and reduced time-to-interactive by 40%
- Engineered cloud-native microservices with **Node.js**, **Express**, and **AWS Lambda**, enabling autoscaling and maintaining a consistent 99.9% system uptime under variable workloads
- Formulated authentication pipelines featuring **JWT** tokens and **Role-Based Access Control (RBAC)**, ensuring granular permission handling and reinforcing platform security posture
- Revamped CI/CD infrastructure through AWS CodePipeline and Webpack, automating build and deployment for Node.js services and
  improving rollback precision during production failures
- Incorporated intelligent recommendation modules using LLMs and RAG (Retrieval-Augmented Generation), helping reduce user
  decision-making overhead by integrating contextual suggestions
- Monitored system health with advanced test suites built in Postman, RestAssured, and JUnit, improving regression coverage and boosting data validation accuracy by 25%

#### Infosys Limited, India 2021-09 - 2022-01

#### **Senior Software Engineer**

- Spearheaded the architecture and implementation of a real-time messaging platform using React, Kafka, Node.js, and Spring Boot, resulting in a 30% improvement in message delivery speed and system reliability under high concurrency
- Engineered backend middleware with **Node.js** and **Express**, acting as an event-driven layer between microservices and **Kafka** pipelines, significantly improving message serialization and fault recovery during communication breakdowns
- Decoupled legacy monolithic applications into microservices using Node.js and containerization techniques, reducing service downtime
  and enabling independent scaling and CI/CD releases
- Facilitated end-to-end infrastructure automation using **Terraform**, **GitHub Actions**, and **AWS EKS**, orchestrating blue/green deployments, load balancing, and infrastructure as code to improve operational efficiency
- Enforced enterprise security standards by configuring **Nginx** reverse proxies, implementing **OAuth 2.0** flows, and managing secure token-based authentication systems across internal APIs
- Instituted regression testing best practices using **Cypress** and **Postman**, improving code coverage metrics and minimizing release bugs through automated, pre-merge test enforcement
- Crafted modular, scalable frontend components in **React**, emphasizing reusability, internationalization, and full accessibility (aligned with **WCAG 2.1**) to support global client deployments
- Integrated and tuned AWS RDS for transactional backend support, configuring read replicas and automated backups to maintain high availability and failover reliability
- Audited system performance using custom logging and Datadog dashboards, proactively identifying memory leaks and optimizing CPU usage across containerized workloads
- Standardized API documentation using Swagger/OpenAPI, improving developer onboarding speed and reducing integration errors
  across third-party consumer teams
- Collaborated cross-functionally with product stakeholders, SREs, and design leads in agile sprints to rapidly prototype and deliver new enterprise features within aggressive release windows

Infosys Limited, India 2019-09 - 2021-08

#### **Software Engineer**

• Programmed dynamic and modular web interfaces using **React** and **Next.js**, leveraging **SSR** and **SSG** techniques to accelerate initial page load times, improve SEO, and enhance responsiveness on both desktop and mobile platforms

- Constructed robust backend APIs with **Node.js** and **Express**, enabling loosely coupled service layers and scalable microservice communication across distributed cloud environments
- Optimized user-facing performance by integrating **Redis** caching strategies within the **Node.js** layer, which resulted in a 25% reduction in average response latency for high-traffic endpoints
- Developed custom hooks and reusable component libraries in **React**, following atomic design principles to ensure consistency, maintainability, and a streamlined development workflow
- Configured DevOps pipelines with **Jenkins**, **Docker**, and **AWS EKS**, automating end-to-end deployment and release cycles while reducing manual effort by over 35%
- Maintained relational and NoSQL databases including **PostgreSQL** and **MongoDB**, writing optimized queries and managing schema versioning for seamless integration with frontend apps
- Wrote automation test suites using **Selenium**, **Mocha**, and **Cypress**, improving code coverage by 40% and significantly reducing post-deployment defect rates
- Enhanced cross-browser compatibility and accessibility by implementing **WCAG 2.1** compliant patterns, ensuring inclusive user experiences across enterprise applications
- Restructured CI environments to include parallelized testing and automated rollback mechanisms, leading to faster and safer delivery of production features
- Diagnosed and resolved system bottlenecks using **OpenTelemetry** and APM tools, identifying slow endpoints and reducing server CPU usage during peak traffic
- Maintained a scalable codebase using modern JavaScript (ES6+) practices, embracing TypeScript and static analysis tools
  to enforce typing and improve code quality

Infosys Limited, India 2019-01 - 2019-05

#### **Systems Engineer Intern**

- Spearheaded the development of a game using ASP.NET Core and React, resulting in a 30% increase in user engagement and retention
- Achieved 100% success in initial testing phases, demonstrating a keen ability to incorporate feedback and enhance game functionality effectively
- Collaborated with cross-functional teams to ensure seamless integration of new features, contributing to a more dynamic and engaging user experience
- Utilized agile methodologies to manage project timelines, consistently delivering high-quality results on schedule
- Applied problem-solving skills to swiftly identify and resolve issues, minimizing downtime and optimizing game performance

#### Education

# Northeastern University, Boston, MA Master of Science in Information Systems 2022-01 - 2023-12

#### KLE Technological University, Hubli, India Bachelor of Engineering in Computer Science

2015-08 - 2019-06

#### Skills

- Programming Languages: Java, JavaScript, C#, Python
- Frameworks: Spring Boot, SASS, Redux, Django, Angular, React, Tailwind CSS Web
- Services: GraphQL, Web APIs, SOAP, AJAX, REST API, Kafka, RabbitMQ Database
- Systems: MySQL, SQL Server, PostgreSQL, MongoDB, DynamoDB
- Cloud Services: AWS (S3, EC2, API Gateway, IAM, Lambda, ELB, SNS, EKS, SQS, CloudWatch)
- Tools and Services: GIT, Figma, Mockups, Docker, Mocha, Kubernetes, Selenium, Cucumber, Jenkins
- Core Competencies: Strong Sense of Ownership, Attention to Detail, Process improvement, Active listening, Problem solving, Agile, Waterfall, Accountability, Big Picture Thinking

#### Certifications

- Apollo Graph Developer Associate (GraphQL)
- · AWS Cloud Practitioner Essentials