HASINI REDDY PATLOLLA

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EDUCATION

University of California, Irvine   **Dec 2024**
MS Computer Science & Engineering   *GPA: 4.0/4.0*

Osmania University   **May 2023**
BS Computer Science & Engineering   *GPA: 4.0/4.0*

TECHNICAL SKILLS

Programming Languages: Python, Java, C, C++, C#, JavaScript, TypeScript, SQL, MATLAB, Golang, Ruby on Rails, Rust
Web Technologies: HTML, CSS, React, Next.js, Node.js, SASS, Redux, RESTful APIs, WebSocket APIs, GraphQL API, Spring Boot
AI/ML: Pandas, Scikit-learn, TensorFlow, XGBoost, PyTorch, OpenCV, CUDA, MLOps, HuggingFace, LangChain, OpenAI API
DevOps & Automation tools: Docker, Kubernetes, Jenkins, Prometheus, Grafana, AWS CloudWatch, Infrastructure as Code
Databases & Cloud: MongoDB, Redis, PostgreSQL, Cassandra, AWS, GCP, Azure, Airflow, Kafka, Hadoop, Spark, DBT, Snowflake
Software Engineering: Linux, UNIX, Jira, GitLab, Agile methodologies, Software Development Lifecycle, GitHub, Git, Bash

EXPERIENCE

Software Engineer Intern   **Dec 2024 - Present**
Genie AI   *New York City, NY*
- Engineered scalable microservices using Node.js and NestJS, containerized with Docker and deployed on AWS with Kubernetes, improving system availability and reducing deployment errors by 30%.
- Integrated Prometheus and Grafana for real-time monitoring of system performance, using AWS CloudWatch for proactive issue detection, which led to a 25% improvement in system performance.
- Automated backend deployment and scaling using GitLab CI/CD pipelines and Kubernetes, ensuring rapid and reliable deployments with zero downtime, improving deployment speed by 40% while enhancing system fault tolerance.

Software Engineer R&D Intern   **Jun - Sep 2024**
UCI Donald Bren School of Information and Computer Sciences   *Irvine, CA*
- Engineered a responsive real-time occupancy tracking system using React, Next.js, Node.js, and WebSocket APIs, enabling efficient sensor data visualization across 5 library floors, reducing student congestion by 30%.
- Enhanced system interactivity by developing dynamic components for floor-specific dashboards and visual data panels, ensuring seamless updates with state management techniques using React hooks and Context API.
- Integrated OAuth 2.0 authentication and TLS/SSL protocols for secure user access, while implementing predictive models in Python with 85% accuracy for future occupancy forecasting, contributing to proactive resource management.

Full-Stack Software Engineer   **Jan - Sep 2023**
AT&T Inc.   *India*
- Developed and optimized RESTful APIs using Java (Spring Boot), enhancing API response times by 35%, supporting real-time product updates for over 1M+ SKUs on the product details page.
- Designed and managed a hybrid database architecture with PostgreSQL and MongoDB, reducing data retrieval latency by 40% and efficiently handling structured and unstructured product data across a 10TB dataset.
- Migrated monolithic services to microservices architecture, enabling modular deployment and horizontal scalability, reducing system downtime by 60% during high-traffic events.
- Integrated backend systems with external eCommerce platforms, including Sam's Club, synchronizing inventory, pricing, and promotional data, increasing cross-platform sales efficiency by 20%.
- Implemented a Java-based TDD (Test-Driven Development) approach using JUnit and Mockito, achieving 90% code coverage; monitored performance using Prometheus and Grafana, resolving critical issues within an average of 30 minutes.

PROJECTS

Touch Feedback for Virtual Reality | *XCode, Unity3D, C#, .NET 4, BLE, WebRTC, Vulkan, XR Toolkit, Swift, VisionOS, Objective C*
- Developed a cross-platform VR application for stroke rehabilitation using Xcode (Swift, Objective-C) and Unity3D (C#, .NET, XR Toolkit), integrating ARKit and haptic feedback for immersive therapy experiences on iOS and Android platforms.
- Designed and deployed a backend on AWS using Node.js and MongoDB, enabling secure Bluetooth Low Energy data transfers and real-time synchronization to support over 50 concurrent users across iOS and Android devices.

Personalized E-commerce Platform | *Next.js, React, TypeScript, SASS, JWT, RESTful API, PostgreSQL, Jenkins, Docker, Kubernetes*
- Built a full stack e-commerce application using Next.js, React, TypeScript, and SASS, with responsive design for seamless user experiences on both web and mobile (Android/iOS), integrated with GraphQL and RESTful APIs for efficient data management.
- Developed and deployed secure, scalable backend with Go, JWT authentication, PostgreSQL for relational data storage, Redis for caching, and CI/CD pipelines with Jenkins, Docker, and Kubernetes for automated testing, deployment, and scaling.

INVOLVEMENT

- Awarded First Prize in EECS Industry Showcase '24 for the capstone project 'Haptic Feedback for VR based Stroke Rehabilitation.'
- Finalist in AT&T PI 17 Innovation Jam for the ML pitch 'Revolutionizing Shopping: Personalized Top 5 Picks in the US.'