Chaitanya Ratnaparkhi

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SUMMARY

Software Engineer with practical experience in full-stack development, REST API design, and AI-enhanced software systems. Currently contributing to production-grade web applications at Sikhi Solutions Inc using Python, React, and AWS cloud infrastructure. Skilled in backend scalability, CI/CD automation, data-driven application architecture, and modern cloud deployment practices. Passionate about building performant, reliable, and maintainable software that solves complex, real-world challenges with creativity and precision.

SKILLS

- **Languages:** C, C++, Python, Java, SQL, JavaScript (ES6+), TypeScript, Golang
- **Frameworks & Libraries:** jQuery, Tailwind CSS, React.js, Node.js, Spring Boot, TensorFlow, Express, Redux
- **Web Technologies:** HTML5, CSS3/Sass, PHP (Basic), Bootstrap, XML, RESTful API, JSON, Accessibility (WCAG), Twirp APIs (basic)
- **Databases:** MySQL, PostgreSQL, Oracle, Database Design & Optimization
- **Tools & Platforms:** Power BI, Postman API Testing, Tableau, Google Analytics, Azure (Basic), AWS (Lambda, EC2, S3, CloudFront)
- **Version Control & Collaboration:** Git, GitHub, Agile/Scrum Methodologies, CI/CD Pipelines, UX/Design Collaboration
- **Machine Learning/AI**: Deep Learning, Transformer models, Large Language Model inference, CNNs, performance optimization, MLflow deployment, GPU acceleration (TensorRT, CUDA)

EDUCATION

Master of Science in Computer Science | Stevens Institute of Technology, NJ, USA   May 2025
Bachelor of Engineering in Computer Science | Marathwada Mitra Mandal's College of Engg., India   June 2023

EXPERIENCE

Sikhi Solutions Inc, Howell, NJ | Software Developer | Sept 2025 – Present

- Collaborate with cross-functional teams to design, develop, and deploy web applications using Python, React, and AWS.
- Build and optimize REST APIs and backend services, improving performance, scalability, and maintainability.
- Participate in code reviews and Agile sprints, ensuring clean architecture and adherence to best practices.
- Diagnose and resolve bugs and performance issues, increasing system stability and response time consistency.
- Write and execute unit and integration tests to validate functionality and enhance CI/CD reliability.
- Contribute to system design discussions, applying principles of modular architecture and test-driven development (TDD).

Innovatus Technologies, India | Software Analyst | Aug 2021- May 2022

- Developed FastAPI microservices for market data, user data, and bulk data load, improving API response times by 20%.
- Maintained and enhanced Java Spring Boot APIs, implementing globalization and localization updates.
- Synchronized PostgreSQL and Salesforce, boosting data accuracy by 30%.
- Automated Salesforce Bulk Data ingestion using AWS Lambda, AppFlows, and S3 backups, reducing manual data handling by 40%.
- Utilized Git CLI and GitHub Desktop for efficient version control, ensuring seamless collaboration and code management.
- Applied frontend performance practices (lazy loading, memoization) to enhance UI responsiveness.
- Collaborated with QA to design unit and integration tests, increasing system reliability and reducing production defects by 20%.

PROJECTS

AI-Powered Portfolio Chatbot | May 2025

- Engineered a full-stack, AI-driven chatbot embedded into my portfolio to autonomously handle real-time queries about my skills, projects, and experience using Node.js backend with REST APIs and React frontend for real-time chatbot integration.
- Leveraged OpenRouter's GPT API with secure environment-based token handling to dynamically serve LLM responses.
- Architected a responsive React + Redux frontend, supporting theme toggling, chat avatars, and real-time keyboard interaction.
- Deployed a stateless Node.js backend via Render, serving static assets and processing JSON-based chat interactions with CORS management and error resilience.

ArtistHub | May 2024

- Developed a feature-rich website integrating E-Commerce, Dashboard, User Registration, and Payment Gateway, ensuring seamless transactions with React and Node.js, integrating e-commerce and payment workflows.
- Optimized server architecture, improving data retrieval speed by 60%, enhancing performance and user experience.
- Strengthened backend stability and scalability through advanced routing and backend function optimization while maintaining high security standards and cross-browser compliant frontend.
- Integrated role-based authentication and secure session management, ensuring data privacy and compliance with best practices.

JSON REST API for User Forums | Sept 2023

- Built a **Flask-based REST API** with SQLite supporting user authentication, CRUD operations, threaded discussions, and date-based queries, adding robust data validation and modular design to ensure a secure, scalable, and maintainable backend architecture.
- Tested endpoints using **Postman** and deployed via MLflow to track performance metrics and ensure reliable production rollout.

SKIN Disease Detection Using ML | Aug 2022

- Built a CNN web app for skin disease classification (94% accuracy), deployed with MLflow for reproducibility and versioning.
- Implemented Grad-CAM visualizations with batch normalization + dropout, boosting interpretability and generalization.
- Experimented with transformer LLMs for text classification, benchmarking latency vs throughput on GPU (CUDA).
- Applied quantization and TensorRT optimization, cutting inference time 35% while maintaining high accuracy and reliability.