

SIVA KUMAR PADALA

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LinkedIn

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Summary

Full-stack developer with AI/ML expertise in React.js, Python, LangChain, and RAG systems, experienced in building intelligent applications and optimizing platforms for performance and scalability.

Technical Skills

Languages: Python, HTML, CSS, SQL

Frontend & Backend: React.js, Redux.js, Tailwind CSS, FastAPI, REST APIs, WebSockets

AI & ML: Prompt Engineering, LLM Integration, RAG, LangChain, Hugging Face, Scikit-learn, Pandas, NumPy

Databases & Cloud: MongoDB, SQL, AWS, Git, GitHub

Tools & Concepts: VS Code, Postman, Jira, API Integration, Modular Architecture, OOPs, Data Structures, Agile

Education

Pragati Engineering College

2020-2024

Bachelor of Technology in Electronic And Communication (GPA: 7.02/ 10.00)

Surampalem, Andhra Pradesh

Projects

RAG-Based Web Intelligence System | Python, LangChain, ChromaDB, RAG, Playwright, BeautifulSoup  Repository

- Built AI-powered web scraping platform using RAG and LangChain to automate website analysis, reducing manual extraction time by 85% and enabling semantic search across 1,000+ pages.
- Engineered modular pipeline with 11+ specialized analyzers using Playwright and BeautifulSoup, achieving 95% extraction accuracy on dynamic JavaScript websites.
- Implemented ChromaDB vector search for natural language querying, improving retrieval relevance by 90% with multi-format exports (Excel, JSON, CSV).

AI MATE - Intelligent Document Chatbot | React, Python, FastAPI, LangChain, Ollama, ChromaDB  Repository

- Built privacy-first chatbot (React, TypeScript, FastAPI) with PDF/DOCX/image ingestion for document-aware conversations using 100% on-device processing.
- Architected local RAG pipeline with LangChain, ChromaDB, and Ollama for offline LLM execution, eliminating cloud data exposure.
- Implemented streaming UX with WebSockets/SSE and parallelized OCR processing using multiprocessing, achieving 3x faster throughput.

Netflix Assist GPT - AI Movie Companion | React.js, Tailwind CSS, Redux, Firebase  Repository

- Developed a Netflix-inspired web application using React.js and Tailwind CSS, integrating Google Gemini API for personalized movie recommendations based on user preferences.
- Implemented Redux.js for centralized state management and memoization to optimize API calls, reducing unnecessary re-renders by 50%, while utilizing Firebase for user authentication and streamlined login processes.

Certifications & Achievements

Agentic AI – DeepLearning.AI

2025

Namaste Node.js & React – NamasteDev.com

2024

Achievements: Completed 3+ hands-on projects in AI/ML and full-stack development.