

Jayanth Reddy Sanikommu

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Education

University of Manchester, Manchester, UK Sep 2023 - Dec 2024
Master of Science in Advanced Computer Science, Specialization in Artificial Intelligence

Sreenidhi Institute of Science and Technology, Hyderabad, India Aug 2018 - May 2022
Bachelor of Technology in Electronics and Computer Engineering

Skills

Languages: JavaScript, TypeScript, Python.

Full Stack Development: React, Next.js, Node.js, Express.js, FastAPI, Flask, REST APIs, Microservices, Serverless.

AI & LLM Systems: LangChain, CrewAI, AI Agents, RAG Systems, Prompt Engineering, Langfuse, PyTorch, TensorFlow.

Cloud, DevOps & Infrastructure: AWS, GCP, Docker, Jenkins, Celery, RabbitMQ, GitHub Actions.

Databases: PostgreSQL, MongoDB, MySQL, Redis, Redshift, Pinecone, ChromaDB.

Testing: Unit Testing, Playwright, Cypress, k6.

Work Experience

Full Stack Engineer, AI | Aibly Jun 2025 - Present

Tech Stack : Langchain, CrewAI, AWS (Bedrock, SQS, S3, RDS, Lambda, SNS), Celery, Redis, Node.JS, React, TypeScript, Tailwind CSS, Python, FastAPI, PostgreSQL, Pinecone (VectorDB), Git.

- Led end-to-end UI development for complex product features, including dashboards, workflow builders using Reactflow, and AI-agent orchestration interfaces, focusing on usability, performance, and scalability.
- Built AI agent systems using CrewAI and LangChain to automate financial compliance workflows (KYC, AML checks, and responsible gambling monitoring) through autonomous task execution and tool-chaining with LLMs.
- Developed an AI-powered document intelligence chatbot allowing clients to query and interact with processed documents in real time using LLM reasoning and vector search (Pinecone).
- Built and deployed production AI workflows integrating LLMs with asynchronous task queues (Celery + Redis), enabling scalable document processing and automated agent pipelines.
- Optimized large-document processing for LLM pipelines by implementing chunking and retrieval strategies to prevent context window overflow while maintaining accurate responses.
- Implemented secure authentication and authorization using AWS Cognito and JWT-based session management, enabling protected APIs and role-based access control (RBAC) across the platform and integration APIs.
- Designed and implemented a credit management system to track and enforce usage limits for AI operations and API consumption.

Co-Founder & CTO | DEFT AI (withdeft.com) Sep 2025 - Present

Tech Stack : GCP, React, TypeScript, Tailwind CSS, Python, FastAPI, PostgreSQL, Langchain, CrewAI

- Co-founded and built an AI SaaS platform that helps brands optimise visibility across LLM search systems, designing the product architecture and core AI agent infrastructure from 0 → MVP.
- Architected the core multi-agent AI system that audits websites, enriches product data, and optimizes content for improved discoverability in AI-generated answers.
- Built automated agents for website audits, competitive analysis, and content generation that continuously improve product metadata and online discoverability.
- Led end-to-end product development including system architecture, backend services, API design, and frontend platform for monitoring AI search visibility.
- Implemented analytics pipelines that track how products appear across LLM platforms, enabling brands to monitor performance and identify optimization opportunities.
- Managed engineering roadmap, product architecture decisions, and technical strategy while collaborating closely with design, growth, and early customers.

Software Engineer | Gallantmass Dec 2023 - May 2025

Tech Stack : Node.JS, React, TypeScript, Python, REST APIs, MongoDB, Jenkins, Git.

- Developed a scalable Learning Management System and Lead Management System using the MERN stack, improving user engagement and operational efficiency.
- Built responsive and intuitive front-end interfaces using React, ensuring cross-browser compatibility and an enhanced user experience.
- Developed and deployed secure backend APIs with Node.js and Express, enabling seamless data flow and robust system functionality.
- Designed database schemas and implemented data storage solutions in MongoDB, ensuring optimized query performance and scalability.

Tech Stack : Microservices, Node.js, Angular, React, JavaScript, TypeScript, PHP, Python, REST APIs, MongoDB, Redis, AWS (Redshift, S3, SQS, Fargate), SQL, RabbitMQ, Docker, PHP.

- Designed and implemented a robust reporting architecture, allowing users to generate downloadable reports in CSV or Excel formats based on their preferences. Integrated with MongoDB and AWS Redshift to handle and report on large datasets.
- Led the migration of data from MongoDB to Redshift using Apache Airflow and AWS Fargate, ensuring data integrity and consistency throughout the process.
- Developed event-driven microservices using ETL processes and Node.js as the backend, leveraging MongoDB Change Streams and AWS S3 for efficient data streaming. Integrated RabbitMQ Messaging Queues to stream data from MongoDB to Amazon Redshift.
- Developed a BDD test automation framework, reducing production issues or report failures by 80%.
- Implemented JWT-based authentication for secure access control across microservices, enhancing system security and user session management.
- Redesigned and refactored a legacy PHP system into a scalable Node.js microservices architecture, improving performance, maintainability, and scalability

Projects

InterviewAI

- Designed and developed InterviewAI, an AI-powered mock interview platform that provides real-time interactive interviews, personalized feedback to help users improve their interview skills.
- Tech Stack: Nextjs, Nodejs, TailwindCSS, PostgreSQL, Drizzle, Clerk, Gemini AI.

ProcureAI Chatbot

- Built an AI-powered procurement assistant that collects customer requirements via natural language, conducts supplier research, performs multi-turn price negotiations, and generates purchase orders with automated email dispatch.
- Implemented LLM-driven requirement extraction, semantic search for supplier data, and negotiation logic with dynamic counter-offers to simulate realistic procurement workflows.
- Tech Stack: Python, Streamlit, Langchain, OpenAI API, ChromaDB (for semantic retrieval), SMTP (for automated email).

JobZenith

- A recruitment and selection website similar to Indeed. Consists of features like an AI chatbot, job profile evaluation based on resume and profile, authenticating using Gmail and Facebook credentials, Email updates for recruiters and job seekers.
- Tech Stack: MongoDB, Express Js, Node Js, React, HTML, CSS, JavaScript.