

# PAVAN KALYAN NARAGANI

Full Stack / AI Agent Developer | Btech (CSE) | [Portfolio](#) | [Linkedin](#)  
Mobile: +91 6302850876 | Email: [pavankalyannaragani@gmail.com](mailto:pavankalyannaragani@gmail.com) | [GitHub](#)



## PROFESSIONAL SUMMARY

Full Stack AI Developer leveraging Django, React, and LangGraph to build scalable RAG systems and autonomous agents. Specialized in bridging secure REST APIs with Vector Search and LLM inference to deliver production-ready AI solutions.

## WORK EXPERIENCE

### Web Developer Intern, LABDOX Pvt Ltd

Dec 2024 - Mar 2025

- Developed and maintained **full stack web application** using **Django, Django Rest Framework(DRF)**, MySQL, and React, ensuring scalable and efficient performance.
- Engineered high-performance RESTful APIs using DRF, reducing server response time by 30% through optimized database queries.
- Orchestrated **frontend-backend integration** by connecting React components with **Django REST APIs**, resulting in a seamless user experience for 500+ active users.
- Collaborated in an **Agile environment**, contributing to design, coding, testing, and debugging, which accelerated project delivery by 20% within the internship period.

## SKILLS

- Backend & Database:** Python, Java, Django, Django Rest Framework(DRF), JWT Auth, MySQL, SQL
- Frontend:** HTML, CSS, React.js, Bootstrap, JavaScript (ES6), Data structures and algorithms(DSA), Operating Systems
- AI & GenAI:** LangChain, LangGraph, RAG Pipelines, Multi-Agent Systems, Pinecone/Chroma (Vector DB), Gemini API
- DevOps & Tools:** AWS(RDS, EC2, Elastic Beanstalk, S3, IAM User), Git/GitHub, Postman, OOP, Hugging Face

## PROJECTS

### End-to-End Full-stack AI Chat Application with RAG | Tech Stack: LangGraph, Django, React.js, DRF REPO

- Developed secure, **production-ready REST APIs with Django & Django REST Framework**, implementing robust logic for chat sessions, PDF uploads, and AI request handling, Conducted unit testing and API validation using Postman.
- Implemented a complete **JWT authentication system** (access, refresh tokens), integrating axios interceptors and protected routes for secure login, register, and logout flows.
- Built a responsive, state-managed frontend using **React.js**, enabling **real-time chat UI, session-based message history**, and seamless document ingestion for AI processing.
- Architected **full-stack communication between React, DRF, PostgreSQL** with optimized database models, **custom user management**, and scalable API integration patterns.
- Built **intelligent agent workflows** using **LangChain, LangGraph**, enabling multi-step reasoning, tool execution, and context-aware decision making for conversational tasks.
- Designed and deployed a full **Retrieval-Augmented Generation (RAG) system** using **Pinecone vector DB** and **HuggingFace embeddings**, improving response accuracy for PDF-based queries.
- Integrated advanced **LLM pipelines (Groq LLM, HuggingFace, Pinecone)** to generate **real-time conversational** outputs with optimized latency and scalable inference patterns.
- Engineered **autonomous agent components** capable of retrieving documents, extracting embeddings, augmenting prompts, and generating refined answers based on session context.
- Deployed the full-stack AI application on Render, configuring environment variables, build pipelines, and production-ready Django-React services to ensure reliable, scalable, and cloud-managed deployment.

### Multi-User Blogging Platform with RBAC | Tech Stack: Python, Django, Bootstrap, SQLite LIVE

- Developed a scalable **Django MVT** based **Content Management System (CMS)**, featuring a robust **Multi-User architecture** utilizing **Template Inheritance** for a DRY codebase and Crisp Forms to render standardized forms.
- Engineered a secure **Role-Based Access Control (RBAC) system using Django Groups & Permissions** to strictly govern **authorization and authentication** levels for Editors, Managers, and Superusers.
- Optimized backend performance using **Context Processors** for global state management and advanced **Django ORM** queries (Q objects) for high-speed content search and filtering.
- Implemented comprehensive **CRUD workflows** for Blogs and Comments, ensuring data integrity through strict ServerSide Validation and secure input handling.
- Deployed the Django CMS on PythonAnywhere with production-grade settings, including static/media file management, and environment-based security controls.

## EDUCATION

Bachelor of Technology in Computer Science (CSE) | Anurag Engineering College | CGPA: 7.41/10 | Nov 2021 – May 2025

Intermediate (MPC) | Srinidhi Junior College | CGPA: 8.3/10 | Jun 2019 – Mar 2021

Matriculation (SSC) | ZPHS Govt School Khammam | CGPA 8.8/10 | Jun 2018 – Mar 2019