

# Lalitha Samyuktha Jayanthi

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Visakhapatnam

## Value Proposition

Data Science graduate with strong proficiency in Python and Django Rest Framework. Hands-on experience building scalable backend services and APIs through academic and personal projects, including efficient database-driven applications using Django ORM. Passionate about NLP, ML models, and emerging technologies like LLMs, RLHF, transformers, and embeddings. Quick learner with exceptional problem-solving and analytical skills, eager to contribute to innovative GenAI SaaS platforms in a fast-paced startup environment. Strong attention to detail with integrated testing practices in development workflows.

## Education

- B. Tech | CSE-Data Science | Avanthi Institute of Engineering and Technology | 2025 | 7.88 CGPA
- Intermediate | Sri Chaitanya Jr. College | 2021 | 9.12 CGPA
- Tenth | Sri Chaitanya School | 2019 | 9.5 CGPA

## Technical Proficiencies

- Programming Languages: Python (Advanced), SQL
- Frameworks & Tools: Django Rest Framework, Django ORM, RESTful APIs, Git, PostgreSQL
- AI/ML Technologies: NLP, ML models, LLMs (e.g., GPT variants), RLHF, Transformers, Embeddings (e.g., BERT, Sentence Transformers)
- Development Practices: Scalable backend services, Database-driven applications, Unit testing (Pytest), Integration testing, Agile methodologies
- Soft Skills: Quick learner, Problem-solving, Analytical thinking, Team collaboration, Attention to detail
- Other: SaaS platform development, Prototype-to-production transitions, Emerging tech research.

## Projects

### GenAI-Powered Job Matching SaaS Prototype (Personal Project, Jan 2025 – Jun 2025)

- Developed a scalable backend for a SaaS platform using Python and Django Rest Framework, creating RESTful APIs to handle user authentication, data processing, and real-time matching.
- Utilized Django ORM to design and optimize database schemas for efficient querying of user profiles and job listings, reducing query times by 40% through indexing and caching.
- Integrated NLP and ML models for resume parsing and job recommendation, incorporating LLMs (via Hugging Face Transformers) for text generation and embeddings for semantic similarity matching.
- Applied RLHF techniques to fine-tune models based on simulated user feedback, improving recommendation accuracy.
- Embedded testing into workflows using Pytest for unit and integration tests, ensuring code quality and scalability for production readiness.
- Researched and adopted emerging technologies like vector databases for embeddings storage, transitioning prototype to a deployable SaaS feature on Heroku.
- Tech Stack: Python, Django Rest Framework, Django ORM, Transformers, Sentence Embeddings, PostgreSQL, Pytest.

### **NLP-Based Chatbot for Customer Support** (Personal Project, Sep 2024 – Dec 2024)

- Built and maintained backend services using Django Rest Framework to support a chatbot API, handling requests for natural language queries.
- Leveraged Django ORM for database interactions, creating models for user sessions and response logging to enable efficient data-driven insights.
- Contributed to NLP engineering by implementing ML models with transformers and embeddings for intent recognition and response generation, achieving 85% accuracy in intent classification.
- Explored LLMs for conversational AI, incorporating RLHF to refine model outputs based on human-like feedback loops.
- Collaborated with a team of 4 to design features, integrating automated testing to maintain high code quality and support ad-hoc enhancements.
- Scaled the prototype to handle increased loads, simulating SaaS platform growth with cloud deployment on AWS.
- Tech Stack: Python, Django Rest Framework, Django ORM, Hugging Face NLP Libraries, LLMs, RLHF, AWS.

### **E-Commerce Backend API with ML Recommendations** (Personal Project, Jun 2024 – Aug 2024)

- Designed and tested scalable APIs using Python and Django Rest Framework for an e-commerce platform, focusing on product catalog management.
- Employed Django ORM to build robust database models for inventory and user data, optimizing for high-traffic queries.
- Incorporated ML models for personalized recommendations, using embeddings and transformers to analyze user behavior and product descriptions.
- Added NLP features for search functionality, with preferred knowledge of RLHF for model tuning.
- Ensured development process included rigorous testing integration, covering edge cases and performance benchmarks.
- Performed research on emerging tech to innovate solutions, such as embedding-based similarity searches for better user experience.
- Tech Stack: Python, Django Rest Framework, Django ORM, Scikit-learn, Transformers, Embeddings, SQLite

## **Internships & Simulations**

- AI Intern – AIMER Society | 8 Weeks
- ML Intern – Indian Servers | 8 Weeks
- Data Science Intern – Yhills | 8 Weeks
- Data Science Intern – Prodigy | 4 Weeks
- Job Simulation – TCS | Forage Platform

## **Certifications**

- Infosys Springboard certification in Software Engineering and Agile development.
- Google Cloud Gen AI.
- Data Analytics by Jobaaj Learnings.
- SQL by Oracle.
- Java by Oracle.