

Perla Jaswanth Krishna

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Portfolio

[linkedin.com/in/jaswanthperla](https://www.linkedin.com/in/jaswanthperla)

github.com/JPKrishna28

Education

NRI Institute of Technology

B.Tech in Artificial Intelligence and Machine Learning - CGPA - 8.9

Sept 2022 – May 2026

Technical Skills

- **GenAI & LLMs:** OpenAI GPT-3.5/4, Gemini, Gemma 2, Prompt Engineering, RAG Systems
- **ML/AI Frameworks:** TensorFlow, Scikit-learn, OpenAI Whisper, Sentence Transformers
- **Programming Languages:** Python, Java, C, FastAPI, REST APIs
- **Databases:** PostgreSQL, MongoDB, Firebase, Vector Databases
- **Web Development:** React.js, Node.js, Express.js, Flask
- **DevOps & Cloud:** Git, GitHub, Docker, Vercel, Netlify, Render
- **Data Processing:** Selenium, FFmpeg, TF-IDF, Embeddings, Semantic Search

Projects

Bilingual Translator using Gemma 2 LLM

- Achieved **94% translation accuracy** in the **Google Hackathon** ranking **5th** among **1,237 participants** using **7B-parameter Gemma 2** model.
- Fine-tuned on **215,000 sentence pairs** across **2 languages** including low-resource Telugu (**23,500 examples**).
- Demonstrated expertise in **LLM fine-tuning, embedding generation, and semantic understanding**.

Instagram Spam Detection via Live Web Scraping

- Built **real-time NLP pipeline** processing **15,000+ Instagram comments** with **7,500-entry** labeled dataset.
- Achieved **92% accuracy** using **TF-IDF** with **6,500 features**, **Naive Bayes**, and **SVM** optimization.
- Implemented **semantic search capabilities** with **250ms** average response time and **99.7%** uptime.
- Processed **8 comments/second** using advanced **text embedding and classification techniques**.

InjuryShield – AI-powered Injury Risk Prediction

- Built **real-time pose analysis system** using **MediaPipe** with **42 skeletal landmarks** extraction.
- Achieved **93% sensitivity and 87% precision** in injury risk prediction through continuous tracking.
- Implemented **ML-based risk assessment** with **72%** reduction in reaction time using alert mechanisms.
- Demonstrated expertise in **computer vision, pattern recognition, and real-time data processing**.

Professional Experience

GenAI Developer Intern

Infosys Spring Board

Remote, India

Sept 2024-Nov 2024

- Developed **AI-powered video analysis system** with **OpenAI GPT-3.5 integration** for content generation.
- Implemented **RAG-based architecture** for intelligent video segment extraction and summarization.
- Built **automated preprocessing pipelines** using **FFmpeg and Python** for multimedia content processing.
- Optimized **embedding generation and retrieval workflows** for enhanced AI-driven content creation.

Data Analyst Intern

Civil Supplies Commissioner Office, Andhra Pradesh

Vijayawada, Andhra Pradesh

Present

- Analyzing **large-scale government datasets** to optimize public distribution system efficiency and resource allocation.
- Creating **automated reports** and insights for policy decision-making using **SQL and PostgreSQL**.

Achievements & Leadership

- Won **4 National-Level Hackathons** with focus on **AI/ML and GenAI applications**
- Created and published **PIP module for Form Validation** in Python (open-source contribution)
- **Cleared GATE 2025 DA paper** demonstrating strong analytical and technical skills

Relevant Certifications

- **Oracle Cloud Infrastructure 2024 Generative AI Certified Professional** – Oracle
- **Career Essentials in Generative AI** – Microsoft and LinkedIn
- **Google IT Automation with Python** – Google
- **Github Foundations** – Github