Satya Praneeth

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Professional Summary

Data Scientist skilled in designing machine learning and NLP solutions that drive business value. Proven expertise in Python, SQL, deep learning, and deploying production-grade models with monitoring tools. Adept at extracting actionable insights from large-scale datasets and delivering measurable improvements to systems and decision-making processes.

Education

National Institute of Technology Tiruchirapalli, MTech in Data Analytics — Aug 2023 – Jun 2025

- GPA: 8.43/10
- **Coursework:** Machine Learning, Deep Learning, NLP, Mathematics(Probability, Statistics, Linear Algebra), Federated Learning

SRKR Engineering College, BTech in Mechanical Egnineering — Aug 2017 – July 2021

- GPA: 8.66/10

Experience

Analyst (Generative AI, Technical & Solution Architects CoE), Axtria – Bengaluru, India — Jul 2025 – Current

- Designed and developed AI-powered agents and chatbots using Azure OpenAI (GPT-4), enhancing client workflows and enabling automated knowledge extraction.
- Built multiple Proofs of Concept (POCs), including an end-to-end chat application and a pipeline builder agent, streamlining enterprise data interaction and reporting.
- Collaborated with cross-functional teams to design scalable system architectures for agent-based solutions.
- Tools: GPT-4, LangChain, FastAPI, React, Streamlit, Git

Campus Intern, Axtria – Noida, India — Jan 2025 – Jul 2025

- Developed generative AI chatbots using LLMs (Azure OpenAI GPT-4) to automate knowledge extraction, reducing manual reporting time by 30%.
- Created interactive dashboards with React.js, TypeScript, and D3.js, improving stakeholder reporting insights and reducing manual analysis effort by 35%.
- Tools: GPT-4, LangChain, Streamlit, FastAPI, React, D3.js, Git, Excel

QA Automation Test Engineer, TCS – Chennai, India — Aug 2017 – Oct 2021

- Automated 80% of regression test cases for banking APIs using Selenium and Java, cutting QA cycle time by 50%.
- Designed a Postman API testing framework with integrated data validation scripts, increasing test coverage by 40% and reducing integration errors.
- Tools: Selenium, Java, Postman, Jira, Bitbucket

Projects

AI-Powered Art Image Denoising using CNN | Python, Pytorch, Computer Vision , OpenCV — May 2025

- Developed a full-stack application to restore damaged AI-generated artwork using a custom Distributed Denoising Convolutional Neural Network(DDCNN).
- Deployed the model as a RESTful API using Render, enabling scalable backend inference.
- Designed an intuitive frontend with React, hosted on Vercel, allowing users to upload and enhance images in real-time.

- Focused on image preprocessing, noise reduction, and efficient inference to achieve visually compelling restorations of generative art.

Inventory Management using Object Detection | Python, YOLO, Tkinter, Computer Vision, PyTorch   Dec 2024

- Built an automated inventory tracking system using YOLO-based object detection, fine-tuned on a custom dataset of industrial pipe images and videos under varied lighting conditions.
- Designed and implemented a CNN-based object counting pipeline to detect and count pipes from both static images and live video feeds with high accuracy.
- Applied data augmentation techniques to improve model robustness and generalization.
- Developed a user-friendly GUI enabling users to upload media and instantly retrieve inventory counts, streamlining warehouse management processes.

Achievements

- Selected for the **Microsoft for Startups – Green AI Initiative** (2025), recognizing innovation in sustainable AI solutions.
- Finalist at **Lemon Ideas (2023)** for developing an Edu-AI platform focused on transforming digital education through smart learning.
- Appointed **Class Representative**, M.Tech (2023–2024), serving as a liaison between faculty and students, coordinating academic and leadership activities.

Technologies

Languages: Python, SQL

Technologies: Pytorch, NLP, Machine Learning, Gen AI, Langchain, FastAPI