GUDUGUNTLA SOWMYA

Hyderabad, Telangana/ India | +91 7093478259 | sowmya190700@gmail.com | Website link: https://soogudportfolio.netlify.app/

SUMMARY*

Generative AI and Machine Learning enthusiast with 3.8 years of experience in data analytics, risk modeling, and computer vision. Adept at building advanced AI tools including large language model applications, multi-agent systems, and real-time interactive platforms. Strong expertise in Python, cloud computing (AWS), and state-of-the-art frameworks like TensorFlow, LangChain, and Crew AI. Demonstrated success in driving cross-functional projects, enhancing operational efficiency, and delivering actionable insights across finance, HR technology, and AI-driven product development.

TECHNICAL SKILLS:

AI & Machine Learning: Supervised Learning, Unsupervised Learning, Deep Learning, Neural Networks, Ensemble Learning Methods, Feature Engineering, Model Evaluation
LLMs & Generative AI: Prompt Engineering, OpenAI APIs, Fine-tuning, Transformers, LangChain, Chatbot Development, Retrieval-Augmented Generation (RAG), Multi-Agent AI Systems (Crew AI)
Frameworks & Libraries: TensorFlow/Keras, Scikit-learn, Pandas, Matplotlib, Seaborn, Open CV, YOLO, Crew AI, LangChain, Streamlit
Natural Language Processing & Conversational AI: Text Summarization, Named Entity Recognition (NER), Semantic Search, CSV/Tabular QA Chatbots, Web Scraping (Serper, Scrapy, BeautifulSoup), Data Parsing (CSV, JSON)
Data Visualization: Power BI, Tableau, Matplotlib, Seaborn
Programming Languages: Python, R, SQL
Cloud Computing: AWS
Development Tools: Git (GitHub), Jupyter Notebooks, VS Code
Data Processing: Data Cleaning, Label Encoding, Standardization, Statistical Techniques
API & Automation: REST API Integration, Environment Variable Management (.env), Workflow Automation

PROFESSIONAL EXPERIENCE

DELOITTE SUPPORT SERVICES INDIA PRIVATE LIMITED
HYDERABAD, TELANGANA, INDIA
Vendor Risk & Compliance Analyst
October 2020 – August 2024

Project - Strategic Expansion of Vendor Risk Optimization and Coverage

- **Received 2 Spot Awards and 1 Applause Award** for achieving a **30% reduction in third-party risk incidents** through data-driven risk assessment and strategic compliance initiatives.
- **Demonstrated leadership in achieving Deloitte's strategic goal** of expanding **VRCT coverage from 48% at the end of FY23 to 97% by October 2023**, completing the transition **4 months ahead of schedule** by effectively communicating with GPS practice teams.
- **Conducted 10+ risk-related projects**, compiled and analysed **500+ weekly data points**, and presented **actionable insights to senior leadership**, driving **15% faster decision-making** on vendor risk.
- **Monitored 100+ vendors** across business resilience, third-party risk, cybersecurity, and identity management, proactively identifying and mitigating **25+ potential threats per quarter**.
- **Supported the implementation and training** of **5+ new policies and risk tools**, improving compliance adherence by **20%** within the Third-Party Risk Program.
- **Raised awareness of operational risks** from third-party engagements by delivering **monthly risk briefings to 10+ stakeholders**, resulting in a **40% reduction in risk exposure**.
- **Partnered with Vendor Management** to develop **data-backed risk mitigation strategies** for **50+ key third-party relationships**, enhancing **vendor accountability by 35%**.
- **Led cross-departmental initiatives** to standardize **due diligence and risk assessment criteria across 4+ teams**, ensuring a **100% consistent framework for third-party onboarding** and reducing compliance gaps by **25%**.

LEADERSHIP EXPERIENCE

DELOITTE SUPPORT SERVICES INDIA PRIVATE LIMITED
HYDERABAD, TELANGANA, INDIA
Vendor Risk & Compliance Analyst
October 2020 – August 2024

Strategic Leader – VRCT Expansion Initiative:

- **Led the successful expansion of VRCT coverage from 48% at the end of FY23 to 97% by October 2023,** exceeding the strategic goal **4 months ahead of schedule**.
- Spearheaded cross-functional collaboration with **GPS practice teams**, effectively transitioning records to VRCT and **doubling coverage volume within 4 months**.
- Communicated key milestones and progress updates to senior leadership, ensuring alignment with compliance and risk governance objectives.
- Recognized for **exceptional leadership and strategic execution**, contributing to improved vendor risk transparency and operational efficiency.

Volunteer – Impact Day:

- **Led a team of 15 volunteers** in organizing and executing **Impact Day initiatives**, driving community engagement and corporate social responsibility efforts.

INTERNSHIP

ATTOOM AI TECHNOLOGY PRIVATE LIMITED
HYDERABAD, TELANGANA, INDIA
Data Science Intern
May 2025 – August 2025

Project - Development of AI-driven Investment Risk Analysis Agent, CSV-based Chatbot, and Sage CV Platform

- Developed an **AI-driven Investment Risk Analysis Agent** using Crew AI and LangChain, coordinating multiple specialized agents (Data Analyst, Trading Strategist, Execution Agent, Risk Manager) to deliver real-time financial insights, formulate optimized trading strategies, and generate comprehensive risk analysis reports with actionable mitigation steps.
- Built a **CSV Chatbot** powered by OpenAI's GPT-3.5 and LangChain, enabling users to query uploaded CSV files in natural language through a Streamlit interface, significantly improving accessibility to data-driven answers for non-technical users.
- Explored and documented integration of **LiveKit** for real-time video/audio features in web platforms, understanding its architecture and use cases for collaborative applications.
- Contributed to the **SageCV recruitment platform** by:
    - Organizing and curating the JD Bank (a central repository of job descriptions) for streamlined candidate-job matching.
    - Conducting rigorous website testing to ensure functional accuracy and optimal user experience.
    - Creating and refining website content to improve clarity, engagement, and informational quality for job seekers and employers.

EDUCATION & OTHER

GITAM UNIVERSITY – M.Sc. DATA SCIENCE
2024 – 2026
OSMANIA UNIVERSITY (LOYOLA ACADEMY UG & PG COLLEGE) – B.Sc. COMPUTER DATA SCIENCE & DATA ANALYTICS ENGINEERING
2017-2020 – CGPA – 8.99/10

LANGUAGES

Telugu, English, Hindi

OTHER EDUCATION

- Certificate of Excellence in technical project competition organized during Machine Learning and Artificial Intelligence Internship
- A Two-Day National workshop on LLMs and Generative AI
- Power BI – Beginner
- Cloud Practitioner Essentials and Data Analytics on AWS
- Python for Data Science, AI and Development
- Machine Learning in Production
- ChatGPT Prompt Engineering for Developers
- LangChain for LLM Application Development
- Multi AI Agent Systems with CrewAI

PROJECTS

CLASSIFICATION OF PLANT SEEDLINGS USING DEEP LEARNING

Developed a convolutional neural network (CNN) using Keras/TensorFlow to classify 12 different plant seedling species. The project included:

- Creating a custom CNN architecture with multiple convolutional, pooling, and dense layers.
- Implementing data preprocessing and augmentation techniques to enhance model generalization.
- Achieving 76.4% validation accuracy after 15 epochs of training.
- Building a complete pipeline from image loading and preprocessing to model training and prediction.
- Developing a user-friendly interface to select test directories and output classification results in CSV format.

The model successfully differentiated between agricultural plant species like "Black-grass," "Charlock," "Common wheat," and others, demonstrating practical application for agricultural technology.

LICENSE PLATE RECOGNITION

Developed an end-to-end computer vision solution for automated vehicle license plate detection and recognition with the following components:

- Implemented a YOLOv8 object detection model to accurately locate license plates in images.
- Created a robust image preprocessing pipeline including noise reduction, adaptive thresholding, and normalization techniques.
- Integrated optical character recognition (OCR) with pytesseract to extract alphanumeric information from detected license plates.
- Designed performance evaluation metrics using Intersection over Union (IoU) and Levenshtein distance to assess detection accuracy and character recognition quality.
- Trained the model using custom datasets with transfer learning for optimized real-world performance.
- Achieved approximately 78% character recognition accuracy on test images.

INTERESTS

Fashion, Yoga, Reading Books, Traveling, Hopping Cafes, Dance, Movies/TV Shows