Gangili Sai Charan

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SUMMARY

Data Science graduate student with 2.5 years of practical experience in designing and deploying machine learning models and data pipelines to drive measurable business outcomes. Proven success in anomaly detection, time-series forecasting, and deep learning applications. Proficient in Python, SQL, and AWS, with expertise in translating data into actionable business intelligence using Tableau and Power BI.

EXPERIENCE

UdbhavX - Stealth Startup Nov 2024 – Present

Software Engineer Hyderabad, INDIA

* Aimed to build a networking platform that connected students, startups, investors, and mentors through AI-driven matching. I designed and implemented domain-interest graphs and intelligent matching algorithms, while supporting MVP development and user testing. This initiative resulted in achieving an 85% matching accuracy rate during beta testing, laying a solid foundation for early-stage platform community building.

Labelmaster Services Inc Jan 2025 – May 2025

Data Analyst Apprentice (Capstone Project) Chicago, IL

* Consolidated and analyzed multi-source marketing data, including CRM records, transaction histories, website traffic, SEO keywords, Google Ads metrics, and email campaign results. Used SQL and Python for data cleaning, aggregation, and trend identification, and created visual reports to support marketing decisions. Identified key patterns in customer engagement and product performance, helping prioritize future marketing strategies. Reduced reporting turnaround time by 25%, improving speed and accuracy of campaign planning and evaluation.

CognitivZen Technologies Pvt Ltd Jul 2021 – Jul 2023

Associate Software Engineer Hyderabad, INDIA

* Built and deployed a web application with OWASP ZAP integration for automated security testing, Role-Based Access Control, and CVSS-based vulnerability scoring. Co-designed an automation framework reduced manual testing by 40% and supported application validation on QA servers. Optimized backend APIs, cutting response times by 40% and improving scalability by 25%, helping deliver a key client project ahead of schedule.

PROJECTS

Cold Mail Generator (GitHub) Feb 2025 – Feb 2025

- Created a cold email generation tool for service-based outreach using Groq and LangChain, extracts job listings from company career pages, parses into structured JSON using LLMs, and generates personalized cold emails with vector-matched portfolio links; streamlined B2B lead generation by automating outreach process for roles.

Multi PDF Files Chatbot (GitHub) Jan 2025 – Jan 2025

- Created a PDF-based chatbot application enables users to interact with multiple documents using natural language by extracting and chunking text, generating semantic embeddings with a language model, and performing similarity matching to retrieve contextually relevant answers; enhanced user experience by ensuring responses were strictly grounded in PDF content.

Agentic Design Patterns with AutoGen (GitHub) Jan 2025 – Jan 2025

- Built an AI agent framework using AutoGen to enable multi-agent collaboration on real-world tasks, including comedy generation, automated customer onboarding, blog post creation, chess gameplay, and financial analysis tools; implemented reflection-based designs for task planning and stock market insights, demonstrating skills in human-in-the-loop systems and practical AI integration.

Earth Surface Temperature Forecasting (GitHub) Feb 2024 – May 2024

- Built a SARIMA-based time-series model with seasonal decomposition to forecast long-term temperature trends. Analyzed 270+ years of historical temperature data to identify seasonal, trend, and residual components. Validated model performance by comparing against ARIMA, achieving a 40% improvement in accuracy with an RMSE of 6.95. Provided forecasting outputs to support energy demand planning and environmental analysis efforts.

Healthcare Management System (GitHub) Sep 2023 – Dec 2023

- Designed and implemented a database-backed system on AWS to manage patient records with high availability. Applied indexing techniques to optimize OLAP queries for faster data retrieval and reporting. Achieved 99.9% system uptime, ensuring reliable access to patient information and operational continuity. Reduced billing processing latency by 60%, improving overall system efficiency and user experience.

Hybrid CNN Architectures (GitHub) Sep 2023 – Dec 2023

- Developed a convolutional neural network with skip connections to classify fine-grained butterfly species images. Applied Bayesian optimization to tune model hyperparameters and improve performance. Trained and evaluate model on a dataset of 12,000 labeled images across multiple species. Achieved an accuracy of 88.8%, demonstrating effective feature extraction and classification for complex image data.

Kaptaan Mac Cloud Inventory – Microsoft Dec 2022 – Mar 2023

- Designed and deployed a Mac OS inventory management system on Azure cloud; collaborated with cross-functional teams to ensure seamless platform provisioning and automation. Implemented role-based access control (RBAC) and integrated agent modules to streamline inventory tracking and enhance system oversight. Improved Azure Service Bus-based communication flows and optimized SQL-based operations for scalable data handling and performance monitoring. Applied Agile practices, Git-based CI/CD pipelines, and Azure DevOps workflows to accelerate iteration cycles; leveraged Python scripting to support infrastructure automation.

WAS (Web Attack Simulator) – Virsec (Company Website) Jun 2021 – Dec 2022

- Collaborated with team to build a Web Attack Simulator (WAS) as part of Virsec's internal vulnerability analysis toolset; delivered a modular simulation engine for high-risk CVSS-rated exploits. Processed and analyzed URL patterns to generate real-time vulnerability insights and security posture evaluations. Implemented DevOps workflows to deploy source code into testing environments using Git, CI/CD pipelines, and Docker-based containers, improving deployment reliability and release cycle efficiency. Reduced CI application complexity by 40% through efficient teamwork and microservice decomposition. Built and deployed RESTful APIs using Python and Docker; ensured end-to-end security compliance using OWASP ZAP and centralized observability via Splunk.

TECHNICAL SKILLS

Programming: Python (TensorFlow, PyTorch, Scikit-learn), SQL, MongoDB, Redis, R, RESTful APIs, PySpark, Debugging
Development Concepts: Object-Oriented Programming, Functional Programming, Singleton, Decorator
Devops & Big Data: Linux, Shell, Git, CI/CD (Github), Scrum, HDFS, Hadoop, Spark, Kafka
Cloud & Web Technologies: AWS (EC2, S3, Lambda, ACM),Docker, Kubernetes, HTML, CSS, JavaScript
Generative AI & LLMs: GPT-4, Llama, AutoGen, Claude, Langchain, Langgraph
AI/ML & Optimization: Time-Series Forecasting, MPC, Stochastic Optimization, XGBoost, CNN (ResNet)

EDUCATION

Illinois Institute of Technology, Chicago, IL Aug 2023 – May 2025
Master's in Data Science

Coursework: Machine Learning, Time Series Analysis, Optimization Techniques, Big Data, Cloud Computing.

ACTIVITIES

- "Implemented of Home Security System Deep Learning Process for Security Applications," *IJIRASE Journal(2020)* – Contributed to academic research in AI-based surveillance systems. [View Publication].