SRI VENKATA SAI SATYA SANJEEV B

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PERSONAL PROFILE

Versatile AI and ML practitioner with a solid foundation in designing and optimizing machine learning models, neural networks, and autonomous systems. Skilled in Python and advanced libraries like TensorFlow, scikit-learn, and OpenCV for implementing deep learning, computer vision, and reinforcement learning solutions. Experienced in feature engineering, hyperparameter tuning, and model performance metrics to tackle complex data challenges. Proficient in data preprocessing and visualization (using Pandas and Matplotlib) to derive actionable insights. Solved over 200+ LeetCode problems, demonstrating strong algorithmic and problem-solving abilities.

KEY SKILLS

- **Programming Languages:** Proficient in Python for data analysis, scripting, and automation.
- **Machine Learning & Deep Learning:** Skilled in ML algorithms (supervised and unsupervised learning), neural network architectures (CNNs, RNNs), and frameworks like TensorFlow and PyTorch.
- **Natural Language Processing (NLP):** Experience with spaCy, NLTK, and TF-IDF for movie recommendations, and word embeddings using GoogleNews-Vectors-Negative300, and Markov models.
- **Generative AI:** Hands-on experience with Amazon Bedrock and Amazon Q for generative AI applications.
- **Agentic AI:** Familiarity with Olama for building autonomous AI agents.
- **Data Engineering & Deployment:** Expertise in ML model deployment using DVC, DagsHub, MLflow, and ETL pipeline design. Proficient in deploying on AWS, with knowledge of Docker for containerization.
- **Workflow Orchestration:** Experienced in Apache Airflow, DAG design, and Astronomer for efficient workflow management.
- **Database Management:** Skilled in PostgreSQL, DBeaver, and API integration (e.g., NASA API).
- **DevOps & Automation:** Proficient in GitHub Actions, CI/CD pipelines, Python logging, and configuration management.
- **Statistical & Mathematical Foundations:** Strong background in statistical analysis, linear algebra, calculus, and probability for ML applications.

EDUCATION

Coventry University, United Kingdom
MSc in Artificial Intelligence and Human Factors
Relevant Key Modules: Artificial Neural Networks (ANN), Decision Making in AI Systems, Machine Learning, Natural Language Processing.

M.S. Ramaiah University of Applied Sciences, Bangalore, India
Bachelor of Technology in Computer Science
Relevant Modules: Data Structures and Algorithms, Software Engineering, Database Management Systems, Artificial Intelligence, Cybersecurity.

EXPERIENCE

AI Security Engineer – Network Security, Deccan InfoTech (P) LTD

Bangalore, India (Jan 2024 – May 2024)

- Designed and deployed an end-to-end machine learning model for network security to detect anomalies in IP addresses, traffic volumes, and other critical network features, achieving a 92% accuracy rate in anomaly detection.
- Engineered robust data pipelines for real-time data ingestion, preprocessing, and feature extraction using Python, Pandas, and Apache Airflow, reducing model training time by 30%.

- Implemented unsupervised learning algorithms such as Isolation Forest, DBSCAN, and Autoencoders to detect suspicious network activities, and minimize false positives by 25%.
- Developed a scalable deployment framework using Docker and AWS, enabling seamless integration with existing security infrastructure and supporting real-time threat alerts.
- Leveraged PostgreSQL for efficient storage and retrieval of large volumes of network data, enabling quick anomaly investigations and reporting.
- Automated model retraining and version control using MLflow and DVC, ensuring continuous improvement of model performance based on evolving network patterns.

Coventry University – Research Center
Researcher – Enhancing Human-AI Collaboration in Logistics Using Large Language Models (LLMs)
Sept 2024 – Present

- Spearheading a thesis project focused on enhancing human-AI collaboration in logistics, leveraging large language models (LLMs) to improve communication and decision-making processes in supply chain operations.
- Designed and implemented experiments to assess the effectiveness of LLMs in automating tasks such as demand forecasting, inventory management, and route optimization in logistics workflows.
- Conducted data preprocessing and feature engineering on logistics-related datasets, improving model training efficiency by 20%.
- Developed a deep learning-based recommendation system integrated with LLMs to provide real-time insights, lessening operational bottlenecks by 15%.
- Collaborated with industry partners to refine model outputs, ensuring alignment with real-world logistics challenges and business goals.
- Analysed performance metrics of the LLM-based system, delivering insights to enhance predictive accuracy by 25%.

CERTIFICATIONS

- Complete Data Science, Machine Learning, DL, NLP Bootcamp
- Artificial Intelligence A-Z
- ANN for Regression
- Complete MLOps Bootcamp
- Deploy ML Models in Production with FastAPI
- Machine Learning: Natural Language Processing
- Deployment of ML Models
- The Complete Data Structures and Algorithms
- TensorFlow for Deep Learning
- Deep Learning and Computer Vision
- Machine Learning A-Z
- SQL for Data Analysis
- LLM Engineering
- Logistic Regression Practical Case Study
- Fine-Tuning LLM with Hugging Face Transformers
- The Complete Self-Driving Car Course
- Docker Essentials