

Nainala Saraswathi Satya Sahithi

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Profile Summary

Enthusiastic Software Developer with a Bachelor's in Computer Science and Engineering, possessing a solid foundation in data science and software engineering. Skilled in developing scalable, efficient software solutions, with expertise in classification tasks and data analysis. Recently gained proficiency in C#, .NET Web API, and Entity Framework, leveraging SOLID principles to write clean, maintainable code. Passionate about continuous learning and delivering innovative solutions to drive team success

Professional Summary

Strong Technical Proficiency: Proficient in Python, Java, and C#, with experience in data science libraries (Pandas, Numpy, Matplotlib, Seaborn, Streamlit) and managing databases (SQL, MySQL). Competent in data visualization tools like Power BI and advanced Excel.

.NET Development: Proficient in C#, .NET Web API, and Entity Framework, applying SOLID principles for clean, maintainable code. Experienced in developing scalable software solutions.

Machine Learning and AI Expertise: Hands-on experience with ML and DL techniques (CNN, RNN, ANN) and proficiency in NLP and LLM. Developed and deployed ML models to optimize business processes and enhance efficiency.

Project Management and Leadership: Led various data science projects, demonstrating effective task management and collaboration. Achieved a 30% reduction in IT team reliance and a 25% improvement in data retrieval efficiency through chatbot solutions.

Data Analysis and Preprocessing: Expert in cleaning, preprocessing, and analyzing large datasets. Improved retrieval accuracy by 30% through similarity searches on document embeddings.

Research and Continuous Learning: Conducted research on industry advancements and experimented with algorithms. Committed to continuous learning with certifications in Data Science, Power BI, Python, and SQL.

Technical Skills

Programming Languages: Python, C#, Java	Databases: SQL, MySQL
Libraries & Frameworks: ASP.NET Web API(EF) Asp .net mvc Panadas, Numpy, Matplotlib, Seaborn, Streamlit,Django	Data Visualization: Power BI
IDEs: Visual Studio,Visual Studio Code, PyCharm, GoogleCollab , Jupyter Notebook	Project Management Tools: JIRA, Azure
MS-Office: Word, Excel, PPT	Machine Learning: Supervised Learning, Unsupervised Learning & Reinforcement Learning
Version Control: Git, GitHub	Clean code: Solid principles ,CQRS

Soft Skills

- Excellent Communication
- Problem Solving
- Analytical Thinking
- Time-Management
- Attention to Detail

Certifications

Nov2023 | **Python Certified** | Issued by 360DigiTMG
Jan 2024 | **Certified Data Scientist** | Issued by 360DigiTMG
Dec 2023 | **Power BI Certified** | Issued by 360DigiTMG
Nov 2023 | **SQL Certified** | Issued by 360DigiTMG

Internship Experience

Data Science Intern Jan 2024 – March 2024
AiSPRY, Hyderabad.

- Leveraged Python for the analysis and managed databases with SQL. Achieved 25% reduction in operational time while maintaining data integrity & availability.
- Preprocessed and analyzed large datasets for the training and validation of AI models. Ensured data quality and optimized feature engineering, resulting in a 15% enhancement in model performance.
- Developed and implemented machine learning models to streamline business processes. Resulted in a 20% increase in operational efficiency.
- Executed similarity searches on document embeddings to retrieve pertinent information, improving retrieval accuracy by 30%.
- Conducted in-depth research on cutting-edge generative AI techniques. Experimented with various algorithms and frameworks to stay updated with the latest advancements, contributing to a 10% improvement in team knowledge and capabilities.

Key Projects

Library Management System: Designed and developed a Library Management System using .NET Framework, adhering to SOLID principles and Clean Architecture to ensure scalability, maintainability, and separation of concerns. Implemented key features such as book management, member registration, borrowing and returning functionality. Incorporated CQRS for clear segregation of commands and queries and applied repository and service patterns to streamline business logic and data access layers.

Medical Inventory Management: Worked in a group data science project with the goal of minimizing the pharmacy company's bounce rate. Conducted literature review by collecting relevant research papers. Cleaned and pre-processed the dataset to address the business problem. Formed clusters and performed forecasting with SARIMAX. Developed and evaluated a predictive model using scikit-learn libraries. Deployed the model for real-time use. Achieved a model accuracy of 92%, reducing inventory bounce rates by 15%.

Efficient Inventory Management with LLM: Successfully, led this group project to create a chatbot using the Hugging Face library's Tapex model to enhance inventory management. Oversaw the development of the chatbot aimed at reducing IT team dependency. Refined the Tapex-based chatbot to expedite data retrieval and offer real-time inventory insights. Utilized advanced natural language processing techniques for an intuitive user interface. Deployed the chatbot using Streamlit for easy and accurate inventory information access. Reduced IT team reliance by 30% and improved data retrieval efficiency by 25%.

House Price Prediction: Built a predictive model to optimize construction company profits. Used Linear Regression, Random Forest algorithms and Flask framework. Ensured accurate model evaluation with metrics such as R² and Mean Absolute Error (MAE). Achieved an R² score of 0.85 and MAE of 12%, increasing profit margins by 8%.

Greenhouse Gas Emission [EDA]: Analyzed and visualized greenhouse gas emissions data for India and China. Utilized Matplotlib for data visualization. Provided comparative insights into emission trends. Contributed to a 20% improvement in policy-making recommendations for environmental impact reduction.

Education

2023 | **B. Tech. (Computer Science Engineering)** | Kakinada Institute of Engineering and Technology
2019 | **Intermediate (M. P. C.)** | Narayana Jr. College, Kakinada
2017 | **SSC** | Bhashyam School, Andhra Pradesh