AMITHA AKEPATI

Irving, TX-75039 | LinkedIn: Amitha-Akepati | amitha.akepati00@gmail.com | +1(469)-318-8841 | Portfolio: Amitha

Seeking a dynamic role to leverage 3 years of real-world experience and a robust background in Data Science and Computer Science to fuel data-driven business strategies. Eager to apply expertise in Data Analytics and Software Development to make impactful contributions in a challenging environment.

EDUCATION

University of Texas at Arlington, Arlington, TX — January 2023 – May 2024

Master's in Data Science

Annamacharya Institute of Technology and Sciences, Rajampet, INDIA — June 2017 – July 2021

Bachelor's in Computer Science and Engineering

TECHNICAL SKILLS

Programming: Python, Golang, SQL, MySQL, SQLite3.

Machine Learning | AI | Generative AI: Supervised Learning, Unsupervised Learning, Reinforcement Learning, Classification, Regression, NumPy, Pandas, Matplotlib, TensorFlow, Pytorch, Keras, Deep Learning, Computer Vision, Pattern Recognition, Natural Language Processing, Generative AI, LLMs, LangChain.

Technical Data Skills: Data Analysis, Data Visualization, Data Mining, Exploratory Data Analysis, Statistical Analysis, Data Handling, Data Extraction, Data Cleaning, Data Manipulation.

Tools: Visual Studio Code, PyCharm, Anaconda, Jupyter Notebook, Spyder, ETL, Power BI, Alteryx, Agile, GIT, PySpark.

WORK EXPERIENCE

Data Research Intern – TLT-Tomorrow's Leaders Today, Frisco, TX — February 2024 - Present

- Analyzed data and conducted research to support generative AI programs and projects, driving problem-solving architecture and programming activities.
- Collaborated with cross-functional teams to gather requirements, design solutions, and ensure successful implementation of generative AI solutions.

Graduate Research Assistant – University of Texas at Arlington, TX — January 2023 - Present

- Collaborated with Dr. Aera Kim Leboulluec on **Generative AI** for Agricultural Research.
- Utilized Machine Learning, Deep Learning, Statistics, and Data Analytics to research and develop Generative AI LLM models for agricultural applications including predictive crop yield modeling. Conducted research in Generative AI for Agricultural Applications, developing and implementing generative AI algorithms and models.

Associate Professional Software Engineer – DXC Technology, Bangalore, INDIA — June 2021 – August 2022

- Implemented and managed **Hewlett-Packard Service Bus** web tools, facilitating self-service message management and tracking. Orchestrated integration and optimization of HPSB web tools for efficient industrial data deployment.
- Developed and optimized critical functionalities within Hewlett-Packard Service Bus web tools to enhance industrial data transmission efficiency and reliability.

CURRICULUM PROJECTS

Personalizes Travel Companion — Fall 2019

- An Intelligent Conversational Agent for Trip Planning Hackathon Smart Bridge in collaboration with IBM.
- Developed a Chatbot using **IBM Watson** to simplify travel planning. Demonstrated chatbot to 100+ users at hackathon received feedback on usability from 80% of testers.

AI Pandemic Support — Summer 2021

- Developed and implemented a real-time face mask detection model using **Convolutional Neural Networks** that achieved 93.88% accuracy and 0.94 F1 score for precision and recall in identifying and localizing face masks.

Exploratory Data Analysis and Predictive Modeling — Spring 2023

- Leveraged Python, OpenCV, TensorFlow, Keras to develop real-time face mask detection model with CNNs achieving 93.88% accuracy, and utilized Python, Jupyter Notebook, Matplotlib, Seaborn for exploratory data analysis and predictive modeling attaining 0.82 R-squared.

Intelligent Indian Railway Reservation System with Python and SQLite3 — Summer 2023

- Developed an intelligent Indian railway reservation system with Python, SQLite3, and Python GUI achieving 25% better user satisfaction, 98% data integrity, and streamlined ticket booking management.

Other projects, Achievements and important concepts learnt:

- Analyzed customer behavior and demographic data using Python and SQL to derive actionable insights for optimizing marketing strategies and identifying trends. Developed Generative Adversarial Networks (GANs) for image synthesis, achieving realistic image generation in various domains.
- Built a time-series forecasting model to predict future sales trends, enabling proactive inventory management and resource allocation. Developed interactive dashboards using Power BI to visualize key metrics and insights.
- Develop PySpark - based churn prediction models for telecom data, employing machine learning algorithms like Logistic Regression and Random Forest.

CERTIFICATIONS

- Microsoft Azure AZ-900 Certification.
- Alteryx Designer Core Certification.
- Power Bi by PWC Certification.
- IBM Python 101 for Data Science.