

Akash Sukhavasi

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Summary

Detail-oriented Machine Learning Engineer with expertise in building and deploying ML models, neural networks, and AI-driven systems. Skilled in leveraging cloud platforms for data analytics, deep learning, and big data solutions to drive business insights and automate complex processes.

Education

George Mason University Fairfax, VA, USA Master's — Data Analytics Engineering December 2024	GPA: 3.8 / 4
GITAM University Hyderabad, TG, India Bachelor's — Computer Science & Engineering June 2021	GPA: 3.0 / 4

Skills

Computational Languages: Python, R, SQL, C, C++, Java, Swift
ML/AI Tools: TensorFlow, Hugging Face Transformers, Neo4J, PyTorch, Keras, Scikit-learn, OpenCV, NLTK, Gensim
Cloud & Big Data: Amazon Web Services (AWS), Azure, Spark, Hadoop, REST API
Visualization: Tableau, Power BI, Matplotlib, Seaborn, Tidyverse
Relevant Courses: Data Mining, Deep Learning, Reinforcement Learning, Computer Vision, NLP, Operations Research

Experience

George Mason University Fairfax, VA, USA Machine Learning Engineer	August 2024 - Present <i>Python, LLMs, Neo4J, Graph Databases, PubMed API, GenAI Implementation</i>
<ul style="list-style-type: none">Developing an AI-driven pipeline using PubMed API to retrieve cancer research articles, converting unstructured data into graph databases with Neo4J.Leveraging LLMs to analyze drug efficacy and adverse effects, providing predictive insights for cancer treatments.Implementing automated knowledge extraction and harmonization techniques to build knowledge graphs, updating treatment predictions and drug response understanding.	
V. V. Technologies Hyderabad, TG, India System Integrator, Network Engineer	May 2017 - Nov 2021 <i>Customer Fulfillment, Technical Analysis & Implementation</i>
<ul style="list-style-type: none">Managed customer tech requirements, delivering tailored system integrations and technical solutions.Developed network infrastructure for small businesses, improving connectivity and operational efficiency.	
Avishkar Software Labs Hyderabad, TG, India Junior iOS Developer	May 2019 - July 2019 <i>Swift Programming, Codebase Management, iOS App Development</i>
<ul style="list-style-type: none">Defined iOS development requirements and delivered efficient solutions in collaboration with production teams.Partnered with design teams to refine app functionality, maintain codebase, and manage operational tasks.	

Projects

Exploring Changes in Economy: Central Banks v Digital Currency A Multi-Model Approach	January 2024 - May 2024 <i>Python, R, ETL, LSTM, Random Forest, Git, Web Development</i>
<ul style="list-style-type: none">Led AI-driven analysis of central bank digital currency impacts using machine learning models (LSTM, Random Forest) to assess cryptocurrency volatility and price trends.Enhanced prediction accuracy for Bitcoin (94.5%) and Ethereum (90.7%) through optimized ML models.	
Integrated Analysis of Air Quality A Multi-Tool Approach	August 2023 - November 2023 <i>Python, R, SQL, AWS, Big Data</i>
<ul style="list-style-type: none">Developed AI-driven pipelines to process and analyze environmental health data, applying machine learning models (Random Forest, SVM) to assess air quality's impact on respiratory health.Utilized AWS and Python-based ETL workflows to automate data handling and predictive analysis.	
FireFlyer - Automated Early Situational Awareness to Firefighters Unmanned Aerial Systems Prototyping	September 2023 - November 2023 <i>CAD, Prototyping, ML, Project Management, Pitch Incubation</i>
<ul style="list-style-type: none">Designed an AI-powered prototype for real-time situational awareness in firefighting, using ML for risk prediction and response optimization.Achieved a 54% reduction in response time by leveraging real-time data from UAVs and AI models for early detection of fire hazards.Awarded Runner-Up in the competition for AI-driven firefighting solutions, securing \$500 in prize funding.	