

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

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

Skills

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| Computational Languages: Python, R, SQL, C, C++, Java, Swift |
| ML/AI Tools: TensorFlow, PyTorch, Scikit-learn, Keras, LangChain, Neo4J, Hugging Face Transformers, OpenCV, NLTK |
| 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

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| 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.Extracting predictive insights using LLMs to analyze drug efficacy and adverse effects 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>System Configuration, Component Integration, Troubleshooting</i> |
| <ul style="list-style-type: none">Configured custom hardware and software systems to meet specific client requirements and optimized setups.Deployed small business network infrastructure, enhancing bandwidth, security, and system reliability. | |
| Avishkar Software Labs Hyderabad, TG, India Junior iOS Developer | May 2019 - July 2019 <i>Swift Programming, Git, 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

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| 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, Computer Vision, Project Management, Pitch Incubation</i> |
| <ul style="list-style-type: none">Designed an AI-powered prototype for real-time situational awareness for first responders in firefighting, risk prediction and response optimization.Reduced response time by 54% by leveraging real-time data from UAVs and AI models for early detection of fire hazards.Awarded Runner-Up in the competition for the solution, securing \$500 in prize. | |