Akash Sukhavasi

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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: C, C++, Java, Python, R, SQL, Swift, HTML, CSS, JavaScript [Angular, React]

Technologies & Tools: Git, MS Office Suite, AWS (EC2, S3, RDS, Glue), Tableau, Docker, Windows, macOS, Linux

Certifications: Unmanned Aerial Systems Prototyping   George Mason University | November 2023
Google IT Professional Support   Google + Coursera | August 2020

Projects

Exploring Changes in Economy: Central Banks v Digital Currency   January 2024 - May 2024
A Multi-Model Approach   *Python, R, ETL, LSTM, Random Forest, Git, Web Development*

- Led an in-depth analysis of the impact of digital currencies on central banking systems using Fourier transforms, regression analysis, and machine learning techniques. Presented findings on an interactive website, providing comprehensive insights into cryptocurrency volatility and price patterns, achieving a prediction accuracy of 94.5% for Bitcoin & 90.7% for Ethereum.
- Enhanced prediction accuracy to 94.5% for Bitcoin and 90.7% for Ethereum using Random Forest models, significantly improving the robustness of the analysis.

Integrated Analysis of Air Quality   August 2023 - November 2023
A Multi-Tool Approach   *Python, R, SQL, Amazon Web Services, Big Data*

- Executed comprehensive ETL operations to process the National Environmental Health Tracking Network dataset, meticulously analyzing the impact of air quality on respiratory health across the U.S.
- Conducted an in-depth analysis, with a focus on ozone and particulate matter, revealing significant correlations between air quality metrics and respiratory health outcomes, providing evidence-based recommendations for targeted public health interventions and advocating for enhanced EPA regulatory measures to mitigate adverse health effects.

FireFlyer - Automated Early Situational Awareness to Firefighters   September 2023 - November 2023
Unmanned Aerial Systems Prototyping   *CAD, Prototyping, Machine Learning, Project Management, Pitch Incubation*

- Led an 8-week intensive program focused on prototyping and problem-solving workshops, specifically addressing critical challenges faced by first responders.
- Developed an AI-based prototype for early situational awareness during fire incidents, w/ upto 54% reduction in response time, and effectively pitched the solution to a panel of judges, highlighting its potential to enhance emergency response and safety measures — Runner Up, won $500.

Customer Segmentation   August 2020 - December 2020
Using K-means Clustering in R   *R, Principal Component Analysis, K-means Clustering, Regression Analysis*

- Analyzed customer segmentation using PCA, factor analysis, and regression to identify satisfied consumers in various markets, resulting in targeted marketing strategies.
- Effectively enhanced the understanding of consumer satisfaction and happiness, which informed strategic decisions and improved customer retention, by an average of 28%.

Experience

Avishkar Software Labs | Hyderabad, TG, India   May 2019 - July 2019
Summer Intern — Junior iOS Developer   *Swift Programming, Codebase Management, iOS App Development*

- Collaborated with production teams to define iOS development requirements, ensuring precise specifications and delivering efficient solutions.
- Partnered with design teams to refine application functionality, diligently maintained the codebase, and adeptly handled related operational tasks.

V. V. Technologies | Hyderabad, TG, India   May 2017 - Nov 2021
Part-Time — System Integrator, Network Engineer   *Customer Fulfillment, Technical Analysis & Implementation*

- Specialized as a System Integrator at a computer store, efficiently addressing and organizing customer requirements and providing tailored technical solutions.
- Specialized in developing network infrastructure for small businesses and home offices, ensuring robust connectivity and seamless operational setups.