NIKITA DALVI

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EDUCATION

University of Southern California Los Angeles, CA
Masters in Electrical and Computer Engineering, Concentration in Data Science August 2022-May 2024
Courses: Probability and Statistics, Linear Algebra, Machine Learning, Deep Learning, NLP, Database Systems

Savitribai Phule Pune University Pune, India
Bachelor of Engineering June 2014-June 2018
Related skills: Data Structures and Algorithms, Data Mining, Python for Machine Learning, Project Management

SKILLS

- Programming Languages: Python, SQL, R, MATLAB, Java, JavaScript, C++, HTML, CSS
- Software: Azure, AWS, Hadoop, Spark, PySpark, Kafka, Docker, Google Cloud Platform, Hugging Face
- Frameworks and Libraries: Scikit-learn, TensorFlow, PyTorch, NumPy, Pandas, Matplotlib, Plotly, Scipy, NLTK, Tidyverse
- Tools and Databases: Git, Tableau, Power BI, MySQL, PostgreSQL, MongoDB, Jupyter, MS Office, Excel

EXPERIENCE

Semio.AI Los Angeles, CA
Machine Learning Research Intern June 2023-August 2023

- Created a UNet-based Transformer architecture for image inpainting, reconstructing lost parts of images within a visual attention system, and worked with the computer vision team to integrate a YOLO v5-based object detection system, achieving 89% accuracy compared to the baseline's 72%
- Leveraged Google Cloud's Vertex AI Platform for deploying the image inpainting and object detection models, ensuring smooth deployment and scalability
- Partnered with the web development team to embed the image inpainting functionality into the website for demo purposes

Baker Hughes India
Project Engineer July 2018-August 2020

- Raised laboratory revenue from $450k to $1M by calibrating and installing Flow, Moisture, and Gas Sensors
- Built real-time data pipeline to collect data from sensors. Utilized collected data for visualizing sensor performance using data analysis techniques, and developed Machine Learning models predicting lifetime of sensors
- Awarded with "Letter of Appreciation for Extraordinary Teamwork" for maximizing quarterly revenue by $300K, and obtaining sales orders worth $200K

ACADEMIC PROJECTS

Flight Fare Prediction | Python, Scikit-learn, Git, AWS Los Angeles, CA

- Analyzed flight fare trends using statistical analysis techniques. Developed and optimized ML model using Logistics Regression, and ensemble methods to accurately forecast trends, leveraging a large dataset comprising 300K flights
- Achieved 0.15 Mean Absolute Error (MAE) with XGBoost Regressor, surpassing baseline model with 0.32 MAE
- Executed seamless live deployment by integrating with GitHub repository through AWS CodePipeline, facilitating streamlined updates and maintenance on AWS Elastic Beanstalk

Credit Card Risk Evaluation | Python, Pandas, Seaborn, Scikit-learn, Jupyter Los Angeles, CA

- Conducted exploratory data analysis to discern optimal dimensionality reduction and imbalanced data handling techniques for effective feature engineering in context of addressing finance sector business problems using data science
- Designed and evaluated predictive models utilizing Logistic Regression, Decision Tree, Random Forest, and Support Vector Machine to forecast default credit card users. Achieved a 92% accuracy operating SVM in combination with K-means SMOTE

Pet-pals: A Socializing app for pet parents | MongoDB, React, Node.js, LLM, AWS, Docker Los Angeles, CA

- Created and tested website utilizing React and Node.js, fostering a community for pet owners to engage and collaborate
- Designed the database schema on MongoDB, leveraged AWS S3 for seamless multimedia storage, and employed Docker to containerize the application, running Docker images on AWS EC2 for robust and scalable deployment. Utilized AWS Lambda for building APIs
- Enhanced the Llama2 model for insightful pet-related query responses and seamlessly integrated it into the website using AWS SageMaker and API Gateway