SUSMITHA ARIKATLA

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SUMMARY

A purpose-driven Data Scientist with deep analytical and quantitative expertise. Seeking to leverage superior strategic and data mining skills to prominent organization. Coming with strong programming skills and ability to build complex predictive models and machine-learning algorithms.

EDUCATION

MSc in Data Science | University of Houston | Houston, Texas | GPA: 3.58 *May 2023*
- Awards & Scholarships: Dean's Honors List, Engineering Dean's Master Scholarship, Master's Competitive Scholarship

Relevant Courses: Neural Networks, Machine Learning, Statistics, Predictive Analytics, Database Management, Big Data, Time series Forecasting, Machine Diagnostics, Hypothesis Testing

WORK EXPERIENCE

Information Visualization – Teaching Assistant | University of Houston | Houston, Texas *Aug 2022 – Dec 2022*
- Assisted in designing/editing course content, administered student activity, and performed administrative assessments.
- Graded and provided detailed feedback on 60+ assignments per week, resulting in a 20% reduction in student inquiries and a 15% improvement in student grades.

Project Planning & Implementation Engineer | Tata Communication | Chennai, India *Apr 2016 – May 2017*
- Developed project plans that include project scope, timelines, budget, and resource requirements.
- Coordinated with vendors, contractors, and other stakeholders to ensure that projects are executed according to plan.
- Monitored project progress and adjustments as necessary to keep projects on track.
- Identified and mitigated project risks and issues.
- Maintained clear and consistent communication with stakeholders throughout the project, including project sponsors, clients, and team members.

SKILLS

Programming languages	: Python (NumPy, Scikit-learn, Pandas, TensorFlow, Keras, PyTorch), R, SQL
Database Tools	: MS Access, MySQL, Oracle SQL Developer, Snowflake, Azure ML Studio, AWS EC2
Visualization Tools	: Tableau, Power BI, TIBCO Spotfire, Qlik Sense, Python (Matplotlib, Seaborn, Plotly), Excel
Environment	: GitHub, Google colab, PyCharm, VSCode, Jupyter, RStudio

PROJECTS

Online Optimization of SVM Classifier using Kernel and Ensemble Techniques *Aug 2022*
- Designed custom kernel functions for SVM using kernel tricks to train unbalanced data.
- Used Boosting and Bagging methods on custom kernel SVM models to improve accuracy.
- Increased accuracy of the models by more than 15% when compared with inbuilt SVM functions.

Online class monitoring tool using facial recognition and emotion analysis *Aug 2022*
- Used Pandas, SciPy, Scikit-learn, PyTorch, and other libraries to process images from video frames.
- Developed modules using state-of-the-art technologies such as FaceNet and DeepFace for facial recognition and emotion analysis. Documented the emotions of students throughout a video lecture and presented a detailed report.

Machine Learning Pipeline to predict adult income using Azure ML Studio *May 2022*
- Collected adult census data from the source onto Azure ML Studio and performed EDA to find the correlation among the features. Trained a Two-Class Boosted Decision Tree Model and performed Hyperparameter Tuning to optimize the parameters.
- Evaluated and published the model as a web service to predict adult income based on user input.

Comparative study of supervised learning algorithms for Intrusion Detection *Apr 2022*
- Gathered Data from sources and processed it using techniques PCA, Label encoding, and Normalization. Trained the Decision Tree, Random Forest, SVM, XGBoost, Naive Bayes, and Advanced Neural Networks algorithms.
- Validated and presented the best algorithm based on Accuracy Score, Execution Time, and F1 score metrics.

CERTIFICATIONS

- Machine Learning – Harvard University - EDX
- Python and Machine Learning for Financial Analysis
- Natural Language Processing (NLP)
- Tableau Desktop Specialist
- Introduction to Deep Learning - HP
- Machine Learning Pipelines with Azure ML Studio