Akhil Songa

40th Street • Philadelphia, PA 19104 • as5735@drexel.edu
• +1 (267)-467-6401 • LinkedIn: https://www.linkedin.com/in/akhil-songa-agnos/

EXPERIENCE

GITAM UNIVERSITY | Visakhapatnam, India
Research Assistant | Jan 2021 – Aug 2021

- Worked under Dr. Bhavani Madireddy on Data Visualization and published a Review article, "A Comparative Study of Data Visualization Techniques Using Covid-19 Data." During the study, analyzed the feasibility and use-cases of various Data Visualization methods with respect to diverse categories of data.

TECHNOCOLABS SOFTWARE | Remote
Data Science Intern | Oct 2021 – Nov 2021

- We worked on Predicting a Startup's Acquisition Status utilized CrunchBase datasets on companies, their acquisitions, investments, and investment rounds. Cleaned unnecessary data points from the original dataset using OneHot encoding and by removing null values, duplicates, and outliers, making it easier to train a machine learning model. Achieving a 93% accuracy after HyperParameter Tuning via GridSearchCV.

INEURON | Remote
Data Science Intern | Feb 2021 – Mar 2022

- Using the Indian-vehicle-license-plates Kaggle dataset, we worked on Vehicle number plate recognition with a custom object detection model using Yolo v4 and Tesseract OCR. It was deployed in the parking lot with the assistance of the IOT team.

PROJECTS

QUORA QUESTIONS TOPIC CLASSIFIER USING TERM FREQUENCY INVERSE DOCUMENT FREQUENCY AND NON-NEGATIVE MATRIX FACTORIZER
September 2022 – October 2022

- Questions from the Quora website have been classified into multiple topics named as politics, economy, technology, education, corporate jobs, books and movies, by using TFIDF vectorization and the Non-Matrix Factorization model, model fitting was completed in just 1.077 seconds, which is 20% faster than my previous model.

AMAZON PRODUCT REVIEW SENTIMENT ANALYSIS USING SENTIMENT INTENSITY ANALYZER - NLTK
August 2022 – September 2022

- By using machine learning techniques like NLTK Vader, Sentiment Intensity Analyzer and vectorization a given review will be classified as negative, neutral, positive (Polarity Scores).

BANK: FOR THERA BANK, PREDICTING THE LIKELYHOOD OF LIABILITY CUSTOMER BUYING PERONAL LOAN USING VARIOUS DATA VISUALIZATION TECHNIQUES
August 2022 – September 2022

- By applying several data visualization techniques to the dataset, I observed that logistic regression, naïve bias, and KNN are effective, and after constructing a confusion matrix, I decided to go with logistic regression with accuracy of 95.46% which is higher than other regression models.

FACE RECOGNITION AND ATTENDANCE
April 2021 – May 2021

- Face recognition algorithm includes finding faces by drawing boundaries, normalizing them with a trained model, feature extraction, and face recognition n using computer vision. OpenCV, dlib and face recognition libraries are used.

EDUCATION

DREXEL UNIVERSITY | Philadelphia, PA (Sept 2022 – 2024)
Master's in data science, Dean's Fellowship, Coursework: Data Acquisition and Pre-Processing, Data Structures and Algorithms, Data Analytics

GITAM UNIVERSITY |Visakhapatnam, India. 2018 – 2022, **GPA: 3.4 (8.17/10)**
Bachelor's in computer science engineering, Coursework: Machine Learning, Probability and Statistics, Data Mining and Data Warehousing, Artificial Intelligence

ACHIEVEMENTS & PUBLICATIONS

- "A Comparative Study of Various Data Visualization Techniques using COVID-19 Data" (August 2021 Issue - IRJET).
- "The Societal and Transformational Impacts of Data Science" (September 2021 Issue - IJERT).
- "Vehicle Number Plate Recognition System Using TESSERACT-OCR" (April 2022 Issue - IJRASET).
- "Credit Card Fraud Detection using Various Machine Learning Algorithms" (September 2022 Issue - IJRASET).
- With total reads of 1,318, My Research Interest Score is higher than 31% of all ResearchGate members, and 84% higher than all ResearchGate members who first published in 2021(ResearchGate Stats)
- Awarded a $8,000 Dean's Fellowship at Drexel University

CERTIFICATIONS

- Participated in Mobile Hacking & Cyber Forensics Workshop, conducted by IEEE student branch.
- Google Android Developer Fundamentals Workshop, from Government of Andhra Pradesh State Skill Development Corporation.
- NLP - Natural Language Processing with Python, Udemy
- Complete Tensorflow 2 and Keras Deep Learning Bootcamp, Udemy
- Programming for Everybody python, from University of Michigan, Coursera (Grade: 98.16%).
- Machine Learning Algorithms: Supervised Learning Tip To Tail, Alberta Machine Intelligence Institute, Coursera (Grade: 96.42%).
- Software Development Processes and Methodologies, University of Minnesota, Coursera (Grade: 96.39%).
- Introduction To Web Development, University of California Davis, Coursera (Grade: 97.95%).

SKILLS

Programming Languages: Python, SQL, Java, C, C++.
Tools/Frameworks: Sci-kit, Matplotlib, Git, Tableau, Seaborn, HTML, CSS, Microsoft Excel, Django, Flask.
Databases: MySQL, Oracle SQL, MongoDB.
Machine Learning Algorithms: Regression models, Classification models, Spacy, YOLO v4, OpenCV, NLP, keras, LSTM, Tensorflow, Pytorch, Sentiment analysis, PowerBI, Plotly, Artificial Neural Netword, Convolutional Neural Network, Recurrent Neural Network, Long Short-Term Memory.

Github: https://github.com/akhilsonga
Research Gate: https://www.researchgate.net/profile/Akhil-Songa/research
ORCID: https://orcid.org/0000-0003-1885-8948