Aditya Lakshmi Narayanan

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Education

Michigan State University, College of Natural Sciences	East Lansing, MI	
Masters of Sciences - Data Science; GPA: 4.0/4.0	August 2022 - Present	
Courses: Statistics for Data Science, Big Data Analysis, Applied Statistical Modelling, Data Mining		
Capstone: Applied Machine Learning - News Text Summarization, Statistical Problems - MI Healthy Climate Plan		
SRM Institute of Science and Technology	Chennai, India	
Bachelor of Technology - Computer Science Engineering; GPA: 3.3/4.0	June 2018 - May 2022	
Courses: Artificial Neural Networks, Statistical Machine Learning, Deep Learning, Databases, Operati	ing Systems, Networking	

Skills

Languages	Python, C++, SQL, R, HTML, Bash/Shell
Frameworks & Tools	Scikit, TensorFlow, Keras, NLTK, OpenCV, Streamlit, Git, Tableau, Docker
Platforms	Linux, Windows, Raspberry, Jetson Nano

EXPERIENCE

Graduate Teaching Assistant

Dept. of Statistics and Probability, Michigan State University

• Grading students for Undergraduate Capstone studies and supporting Honors Project students

Jan 2023 - Present

Jun 2023 - Aug 2023

Jan 2021 - Feb 2021

Chennai, India

East Lansing, MI

East Lansing, MI

- Facilitated recitation of Statistical Methods to 100+ undergraduate students regarding Statistical Methods
- Tutored in the courses Statistics, Probability, and Statistical Methods in Statistical Learning Center

Data Analyst

Feed the Future Innovation Lab, Michigan State University

- Collected and meticulously cleaned datasets to create insightful visualizations and transformed static visualizations from Google Looker Studio into interactive Tableau visualizations, resulting in improved engagement
- Delivered data-driven insights to stakeholders, using clear and compelling visualizations to highlight 17 Key Performance Indicators (KPIs). This contribution facilitated informed and strategic decision-making processes.

Software Intern

Center for Development of Advanced Computing, Chennai

- Implemented Deep Learning Algorithm (YoLo-V3, darknet) for a Face Detection Application that generates automated ID cards with 93% accuracy
- Developed an application interface to detect a face efficiently using multiple techniques like Haar-Cascade Detection achieving an accuracy of over 80%

Projects

News Text Summarization Natural Language Processing, Generative AI	March 2023 - July 2023
• Explored CNN-DailyMail News dataset to analyze the length, and frequency of differen	t words and phrases
• Trained and evaluated several models such as Bi-Directional LSTM and Large Languag	e Models like BERT for
extractive and abstractive summarization using metrics such as ROUGE	

East Lansing Weather Prediction | Data Analysis, Machine Learning October 2022 - December 2022

- Analyzed more than 400k data points of East Lansing weather data to have an overview of the types of weather and an average temperature of East Lansing weather
- Constructed Machine Learning models like KNN, Decision Tree, and Random Forest and created an interactive Streamlit Dashboard to allow users to predict and test models best suited for their needs

RESEARCH PAPERS

Selective Encryption of 3D Medical Images for Fast Retrieval | Data Visualization Aug 2021 - Feb 2022

- Research Paper Objective Applied selective encryption on 3D MRI Brain Scans to speed up retrieval process
- Trained 3D ResNet Models using Transfer Learning to extract Segmentation Mask, on which Chaotic Maps were used to perform Selective Encryption
- Generated 3D Visualization of the Patient's X-Ray. Aided in improving the speed of encryption and decryption process by 35%