Aditya Lakshmi Narayanan

East Lansing, MI | +1 (312) 800-3792 | lakshmia@msu.edu | [Linkedin](#) | [Github](#)

EDUCATION

Michigan State University, College of Natural Sciences   East Lansing, MI
Masters of Sciences - Data Science; GPA: 3.94/4.0   *August 2022 - May 2024*
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   *June 2018 - May 2022*
Courses: *Artificial Neural Networks, Statistical Machine Learning, Deep Learning, Databases, Operating Systems, Networking*

SKILLS

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

EXPERIENCE

Graduate Teaching Assistant   Jan 2023 - Present
Dept. of Statistics and Probability, Michigan State University   *East Lansing, MI*
- Grading 20 students for Undergraduate Capstone studies and supporting highly capable Honors Project students
- Facilitated recitation of Statistical Methods to 200+ undergraduate students regarding Statistical Methods
- Tutored 200+ in the courses Statistics, Probability, and Statistical Methods in Statistical Learning Center

Data Analyst   Jun 2023 - Aug 2023
Feed the Future Innovation Lab, Michigan State University   *East Lansing, MI*
- 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   Jan 2021 - Feb 2021
Center for Development of Advanced Computing, Chennai   *Chennai, India*
- 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 different words and phrases
- Trained and evaluated several models such as Bi-Directional LSTM and Large Language 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%