LAKSHANA TEKULA

+1(901)-663-5186|tekulalakshana@gmail.com| GitHub | LinkedIn

EDUCATION

The University of Memphis   Memphis, TN, USA
M.S., in Data Science **(GPA 3.8/4)**   *Jan'23 – Dec'24*
Jawaharlal Nehru Technological University   Hyderabad, TS, India
B.Tech., in Mechanical Engineering **(GPA 3.44/4)**   *July'17 - July'21*
- Achieved a **top 2% ranking** among 141,054 students in the engineering entrance exam.

TECHNICAL SKILLS

Programming Languages : Python, Java, R, MATLAB, HTML,CSS
Data Science   : Machine learning, Natural Language Processing, Deep Learning, Reinforcement Learning, Statistics, Artificial Intelligence, SQL, Power BI, Excel, MS Office, SAS
Other Skills   : Inventory Management, MRP, CAD, CATIA, Solid Edge, ANSYS, Agile Project Management, ERP

PROFESSIONAL EXPERIENCE

Data Analyst| Infosys Limited| Hyderabad, India   *Jan'22 - Dec'22*
- Analyzed large datasets within the **Apache Hadoop framework**, employing advanced algorithms that resulted in a **20% improvement** in decision-making processes.
- Utilized **Power BI** analytical tool to create visually compelling **dashboards**, aiding in the interpretation of complex data trends and facilitating informed decision-making.
- Developed and executed comprehensive **data cleansing** processes, **enhancing data accuracy by 18%** and ensuring high-quality outputs.
- Collaborated with **cross-functional teams** to identify and implement key performance indicators (**KPI**s), leading to a **25% increase in overall business performance**.
- Implemented **data encryption** techniques and access controls in **Hadoop HDFS**, enhancing data security and compliance with industry standards.

Process Design Intern| MTAR Technologies Limited| Hyderabad, India   *Sep'21 - Jan'22*
- Created comprehensive **process plans** for diverse products including a prestigious project **Vikas engine** used in **rockets** using **CAD, CATIA, Solid Edge, and ANSYS**, ensuring efficient manufacturing workflows and adherence to quality standards.
- Utilized CAD and other design tools to optimize manufacturing processes, resulting in a **10% reduction in production time** and an **8% decrease in material waste**.
- Conducted thorough **analyses of production data**, identifying areas for improvement and implementing **strategic changes** to enhance overall process efficiency.

ACADEMIC PROJECTS

Facial Emotion Recognition Using Deep Learning Models: *Python| Neural Networks| Data Analysis*   *[Project Link]*
- Achieved a notable **63% accuracy** and **80% Precision** across multiple classes through the implementation of CNNs.
- Evaluated the impact of image rotation, scaling, and noise addition techniques, with findings indicating a **7% enhancement in FER accuracy** through **optimized image processing**.
- Identified and addressed **real-world challenges**, providing recommendations for enhancing the accuracy and applicability of FER systems.
- Detailed explanation of the data acquisition, preprocessing, **model architecture**, and test-time augmentation.
- Description of five-layer **neural network** architecture, **hyperparameter tuning**, and insights into model's structure.

Object Recognition using COIL-100 dataset: *Python| Deep Learning |Data Analysis*   *[Project Link]*
- Achieved exceptional **accuracy of 99.86%** through implementation of **DCNNs** in object recognition, displaying better performance when compared to a diverse set of alternative machine learning algorithms.
- Improved dataset quality through precise pixel normalization and resolution adjustments, contributing to a **15% increase in model accuracy**.
- Evaluated the predictive model using **Scikit-learn cross-validation** techniques to fine-tune parameters, ensuring an in-depth optimization process and refining performance to meet the highest standards of accuracy and precision.

ACHIEVEMENTS

- Awarded **Hacker Rank 5-star Gold Badge** in SQL & Python