# ROHITH PAMIDMARRI

### ABOUT ME

•A highly motivated and self-driven individual with a strong passion for computer science, Machine Learning, Deep learning, NLP motivated to apply these skills in all endeavors.

Interests: Algorithms, Machine Learning, Deep Learning, NLP

#### EDUCATION

# •Indian Institute of Information Technology Chennai

Aug. 2021 - May 2025

 $Bachelor's\ Computer\ Science,\ currently\ pursuing$ 

Chennai, India

- CGPA: 9.23:

#### •Narayana Junior College

Aug. 2019 - May 2021

Science MPC

Nellore, AP, India

**- 97.1**%:

# EXPERIENCE

•Research Intern Dec 2023 - Jan 2024

Research under Dr. Umarani Jayaraman, Assistant Professor, IIITDM Kancheepuram

Repository

- Developed a Multilayer Neural Network for Multiclass Classification from scratch using Python without any tensorflow libraries
- Gained a solid comprehension of how the feedforward and backpropagation mechanisms are implemented within TensorFlow libraries.
- Used Gradient descent technique for Back Propagation in layers parameters updation with Sigmoid, ReLu activation functions in hidden layers
- Model achieved 90% accuracy in classifying handwritten digits using the MNIST dataset
- Technologies Used: Python . Machine Learning . Deep Learning .Mathematical Modelling

# PROJECTS

# •Saferide: Advanced Helmet and Number Plate Detection for Traffic Safety

Jan 2024 - Feb 2024

Project under Dr. Preeth R, Assistant Professor, IIITDM Kancheepuram

Project Repository

- Implemented a multi-stage approach where YOLOv8 first detects bike riders in the scene, followed by a subsequent YOLOv8 pass to determine if the rider is wearing a helmet or not..
- Integrated a Convolutional Neural Network (CNN) to extract number plate details from images where riders are identified without helmets..
- Designed and implemented data preprocessing pipelines to ensure optimal performance of the YOLOv8 and CNN models, including data augmentation and resizing..
- Developed an efficient database system to store information about riders detected without helmets, including timestamps and junction locations..

#### •Air-Canvas OpenCV

Dec 2023 - Jan 2024

Project under Dr. Ram Prasad Pady, Assistant Professor, IIITDM Kancheepuram

**Project Repository** 

- Designed and implemented an interactive air canvas system using OpenCV, enabling users to draw and erase in real-time using hand gestures.
- $-\ Utilized\ computer\ vision\ techniques\ to\ track\ hand\ movements\ and\ recognize\ gestures\ for\ drawing\ and\ erasing\ functionalities.$
- Developed an intuitive user interface with multiple color options for drawing and a gesture-based erase function

# •Email spam/ham-detection using BERT

Dec 2023

Self-guided Project

Project Repository

- Developed a BERT-based natural language processing model using TensorFlow and Hub, proficiently classifying emails as spam or non-spam with a focus on intricate language patterns.
- Implemented strategic downsampling to address class imbalance, significantly improving the model's ability to discern nuanced patterns and enhancing overall performance.
- Designed a functional TensorFlow model, combining BERT layers for text processing and neural network layers for classification...

### •Movie-Verse Feb 2023 - April 2023

- Developed a feature-rich movie review system using HTML, CSS, JavaScript, jQuery, and PHP, showcasing exceptional front-end design skills and dynamic content generation.
- Implemented user privacy measures through a secure login page, while providing exclusive editing capabilities to agents for maintaining data integrity.
- Leveraged MySQL databases for efficient management of movie data, including ratings, reviews, and summaries, honing expertise in web development and database handling

#### •Banking System

Sep 2022 - Nov 2022

Project under Dr. Masilamani V, Associate professor & HOD CSE Department, IIITDM Kancheepuram

**Project Repository** 

Jun 2023 - Present

- Developed a C++ banking system enabling users to open savings and checking accounts, perform transactions, and manage interest rates and fees
- Utilized object-oriented programming and inheritance for code reusability and to create a class hierarchy for savings and checking accounts..
- Implemented robust input validation and error handling for a smooth user experience and secure operations.

# For more details on my project works kindly visit my GitHub profile: https://github.com/Rohith-pamidimarri

# SKILLS

- Subjects: Computer Vision and Image Processing, LLM's, Data Science, Machine Learning Algorithms, Deep Learning, Data Structures, Data Pre-processing, Data Analysis, Model training
- Programming Language: Python, C, C++, R, HTML, CSS, JS, PHP, MASM
- Frameworks: OpenCV, Tensorflow, Bootstrap
- Databases: PHPMyAdmin, MongoDB
- Tools: Git, Visual Studio Code, Google Cloud Platform, Jupyter Notebook, Anaconda, Microsoft SQL Server
- Soft skills: Critical Problem Solving, Systems Thinking, Teamwork, Leadership.

•Placement Cell Coordinator, Student Affairs Council, IIITDM Kancheepuram

# Positions of Responsibility

$ \textbf{-Class Representative}, \ Computer \ Science \ Department, \ IIITDM \ Kancheepuram \\$	Jul 2023 - Nov 2023
•Samgatha Sponsorship Volunteer, Students Cultural Affairs, IIITDM Kancheepuram	Jul 2023 - Nov 2023
LICENCES & CERTIFICATIONS	
$ \textbf{•Natural Language Processing Specialization}, NLP \textbf{ - } Code \ Basics \\$	2023
•Machine Learning Specialization, Stanford University - Coursera	2023
•Python for Data Science and Machine Learning Bootcamp, Pierian Data - Udemy	2023
•The Complete Web Development Bootcampp, Angela Yu - Udemy	2023
•Joy of Computing Python, IIT Madras - NPTEL	2022
-Introduction to Artificial Intelligence with Python , Harvard University - $\operatorname{EdX}$	2022
•The Joy of Computing using Python, IIT Madras - NPTEL	2020