Rohith Dandi

Hyderabad,Telangana
+91-9392358565 rohith.dandi1712@gmail.com Rohith Dandi dandirohith rohith-portfolio

EDUCATION

Mahindra University **2020 - 2024**
Computer Science and Engineering - CGPA-7.9 *Hyderabad, India*

PROJECTS

Battleship Bot | **fall '22**

- A bot in python that can play the Battleship board game utilizing probability density functions and some predictive algorithms to optimize performance.

Multi-Stage Deep Learning Project | **fall '24**

- ANN Regression, Neural Machine Translation, and Conditional Language Generation
- Stage-1: The construction and optimization of an Artificial Neural Network (ANN) for regression tasks, leveraging vectorization in Python without the use of deep learning libraries.
- Stage-2: Neural machine translation using Python code provided in a book chapter by Jason Brown Lee
- Stage-3: Extended the stage-2 to incorporate conditional language generation for improved accuracy.

Interpretable Face Representation Learning with Explainable AI | **Feb 2024 - Jun 2024**

- Trained state-of-the-art face recognition models (ArcFace, FaceNet, CosFace) on popular datasets like CelebA and CASIA-WebFace, achieving high accuracy and robustness. Evaluated model performance using industry-standard metrics (TPR, FPR) on the LFW benchmark
- Leveraged Grad-CAM for model interpretability and developed advanced saliency mapping methods, including fixed-size masks at various facial locations and the SRISE algorithm with random Gaussian kernel masking. Designed a novel heatmap masking approach utilizing Grad-CAM color-based importance (red for high to blue for least) to identify and visualize image saliency effectively.

Order Execution and Management System for Deribit Test API | **Dec 2024**

- Designed and developed a robust Command-Line Interface (CLI) application for trading on the Deribit Test WebSocket API. The application integrates Boost.Beast and Boost.Asio for secure, asynchronous WebSocket communication and leverages Boost.Program Options to enable flexible and intuitive CLI functionality.
- Designed comprehensive features, including order execution, market data retrieval, and real-time subscription handling, supported by thread-safe queues and multi-threaded I/O.Achieved an average order placement latency of 186.95 ms, making the system well-suited for algorithmic trading and strategy development, while acknowledging its limitations for high-frequency trading (HFT).

RESEARCH PUBLICATIONS

- **"Soybean Genome Clustering Using Quantum-Based Fuzzy C-Means Algorithm"**, The 30th International Conference on Neural Information Processing, ICONIP, Nov' 20-23, 2023, Changsha, China.

PROFESSIONAL EXPERIENCE

Mahindra University **Jan 2023 – Jan 2024**
Research Intern *Hyderabad, India*

- Worked as a Research Intern for Professor **Dr. Om Prakash Patel (P.h.D., IIT Indore, Faculty at Mahindra University, India).**

Mahindra University **Feb 2024 - Jun 2024**
Research Intern *Hyderabad, India*

- Worked as a Research Intern for Professor **Dr. Nidhi Goyal (Ph.D. in Computer Science, IIIT-Delhi Faculty at Mahindra University, India).**

TECHNICAL SKILLS

Languages: Python, C, C++(Proficient),Java
Web Development: HTML, CSS, JavaScript, React, Redux.
Tools/Technologies: PyTorch, Tensorflow ExpressJS, NodeJS, Git, GitHub, MATLAB, AutoCAD, LATEX.

ACHIEVEMENTS

ICPC Mathura-Kanpur regional 2022/2023

Top 10 merit scholarship, Computer Science, Mahindra University (2020/21, 2021/22).

Academic Credentials

- Secured OBC-NCL Rank 3998 in JEE (Advanced)
- Scored 96.46 percentile in JEE Main (B.Tech)

INTERESTS

- Data Structures and Algorithms
- Competitive Coding
- Graph Theory
- Artificial Intelligence
- Combinatorics and Probability