



# Mirarani Choudhury

## Research and Development Engineer

"Dynamic professional with 1.7 years of combined expertise in Machine Learning and Cybersecurity. Specialized in patch management within zero-trust networks, adept at PEP integration for network access, and proficient in ML and NLP. Seeking a challenging role to leverage my skills and contribute to innovative projects in a dynamic and growth-oriented environment.

## Contact

### Phone

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### Address

Electronic city, Bangalore

## Education

2023

**M.Tech (8.55 cgpa)**

NIT, Durgapur, West Bengal

2017

**B.Tech (8.03 cgpa)**

Parala Maharaja Engineering College  
Berhampur, Odisha

## Expertise

- Machine Learning
- NLP
- SQL
- Computer vision
- Deep learning
- Python
- MLOP
- GIT lab
- LLM (Basic)

## Language

English

Odia

Hindi

## Experience

07/2022- Present

(1 Year 7 month)

CDAC | Bangalore

### Knowledge Associate

- Developed a robust machine learning model for precise network traffic classification, augmenting overall network security measures.
- Installed and configured osquery, seamlessly orchestrating host data acquisition through Fleet server for enhanced visibility and management.
- Actively involved in the integration of Policy Enforcement Point (PEP) solutions, bolstering the Zero Trust network framework to fortify cybersecurity protocols.

## Project Details

### End to End MLOPS Project Deployment with MLFLOW and integration with AWS

- Dataset- Kaggle wine quality dataset
- Tools used- Git lab, MLOPs pip line, VS code

### Text extraction from Invoice image using paddleOCR with a confidence score

- Tools used: PaddleOCR, OpenCV

### Tuning of PID Controller For LFC of Two Area Hybrid Restructured Power System using Differential Evolution.

- To regulate the power output in a connected system, I work on adjusting the main frequency and controlling the changes in line power.
- Tools used: Differential evolutionary technology, MatLab

## Publications

### Network Traffic Classification Using Supervised Learning Algorithms (IEEE ICCECE 2023)

- Network traffic classification is needed for the identification of intrusion networks and the classification of different types of applications. ML algorithms play a crucial role in classification purposes.
- Link: <https://ieeexplore.ieee.org/document/10084931/keywords>

## Softskills

- Quick Learner , Leadership
- Team Work and collaboration
- Problem-solving
- Networking
- Time management
- Communication skills