PRAKASH METLA

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EDUCATION

UNIVERSITY OF ENGINEERING AND MANAGEMENT, KOLKATA

B.Tech in Computer Science and Engineering (Artificial Intelligence and Machine LEARNING)
2022 - 2026 | Kolkata, WB Cumulative CGPA: 8.61 (Till 6th Semester)

LINKS

Github:// dip04-eng HackerRank://@PRAKASMETIAZB LinkedIn://Prakash Metla

COURSEWORK

Data Structures and Algorithms Object Oriented Programming Computer Networks Machine Learning Deep Learning

SKILLS

PROGRAMMING Java • C • Python Web Development: HTML CSS

Databases:

MySQL

Machine Learning:

Supervised Learning • Unsupervised Learning • Reinforcement Learning Deep Learning:

Convolutional Neural Networks (CNN)

- Artificial Neural Networks (ANN)
- Object Detection (YOLO-based)

ACHIEVEMENTS

- CYBER SECURITY & ETHICAL HACKING
- INTERNSHIP(PRODIG Y INFOTECH) -MACHINE LEARNING

CERTIFICATIONS

INTRODUCTION TO ARTIFICIAL INTELLIGENCE

| Jun 2024 - present

IOT FOUNDATIONS: OPERATING SYSTEM FUNDAMENTALS

| Sep 2024 - present

PROJECTS

Smart Object Detection

| Oct 2024 - Nov 2024

- Designed and built an autonomous car using Arduino and motors for movement..
- Integrated an ultrasonic sensor for real-time obstacle detection.
- Hardware: Arduino, Ultrasonic Sensor, Raspberry Pi 3 Model B, Computer Vision

Smart Inventory Management System

| Feb 2025 - Feb 2025

- Developed an AI-powered legal education platform to bridge the awareness gap in rural and underserved communities.
- Built a Constitution-based AI chatbot powered by Hugging Face models, and generative AI to provide accurate and up-to-date legal information.
- Integrated vernacular support for multilingual interaction, ensuring accessibility for non-English speakers.
- Added OpenStreetMap integration for AI-assisted location search of nearby legal aid centers.
- Tech Stack: React, Flask, Firebase, Gemini API, Hugging Face, OpenStreetMap, Tailwind CSS, Vercel, Figma, Postman, Ngrok.

RESEARCH WORKS

SUSTAINABLE FISH DISEASE DETECTION AND MONITORING SYSTEM

| Jan 2024 - present

- Developing a real-time fish disease detection system using YOLOv8 and Jetson Nano.
- Integrating Arducam IMX219 for underwater imaging and hardware mechanisms for fish separation.
- Achieved 92% precision and 70% F1-score in initial testing.
- Technology: YOLOv8n, Jetson Nano, Python, FAST API.

INNOVATIVE PLANT DISEASE DETECTION AND CURE THAT DISEASE:

I June 2024 - present

- Utilizes a YOLOv8 model to train and detect plant diseases in real-time.
- The system automatically identifies plant diseases and triggers necessary actions for treatment.
- Hardware: Combines Arduino and Raspberry Pi for seamless operation, using sensors and processing units for disease detection and system control..
- Technology: YOLOv8, Deep Learning, Python, TensorFlow, Computer Vision, Automated Systems.

HOBBIES

• CRICKET • PHOTOGRAPHY • COOKING • VIDEOGRAPHY • TRAVELLING