PRASAMITA BANGAL

3RD YEAR INTEGRATED BTECH + MTECH STUDENT

CONTACT

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SKILLS

- **Languages: Python, C, JavaScript, HTML, CSS**
- **AI/ML: Scikit-learn, TensorFlow, OpenCV, Pandas, NumPy**
- **Web Dev: Flask, Streamlit, jQuery, Git/GitHub**
- **Cybersecurity: Wireshark, Autopsy, Hack The Box, Drone Forensics**
- **Concepts: NLP, Machine Learning, Data Analysis, Digital Forensics**

INTERESTS

Network Defense, Digital Forensics, Ethical Hacking, Secure AI, Threat Intelligence

SOFT SKILLS

Analytical Thinking | Problem Solving | Collaboration

EDUCATION

Integrated B.Tech + M.Tech in Computer Science and Engineering

Mahindra University, Hyderabad, Telangana
Past semester GPA: 8.6

ACHIEVEMENTS

- Participated and active in HackTheBox.
- Ongoing Research PROJECT On **DRONE FORENSICS**
- Member of Student Council at University.
- Merit Project: Arduino Workshop – IoT innovation recognition.
- Active participant in AI/ML workshops, hackathons, and innovation challenges.
- Finalist: Qublitz Hackathon (University) – Cracked code word under time constraints

PROFILE

Innovative and passionate Integrated M.Tech (CSE) student interested in AI-ML, NLP, Web Development, and Cybersecurity.Skilled in applying technical and creative approaches to build AI-driven systems, intelligent automation tools, and secure digital applications. Published researcher with strong problem-solving and design thinking mindset.

KEY PROJECTS

DroneTalk – NLP-Based Drone Command System (Ongoing)

An NLP system that converts natural language commands like “Fly 50 meters north and take a picture” into structured drone actions.

- Implements intent classification, slot filling, and command generation for drone control automation. It demonstrates the intersection of NLP and autonomous systems.
- Tech Stack: Python, NLP

AI-Driven Intrusion Detection System (Published Research)

Developed an AI-powered network intrusion detection system to detect and classify cyber threats in real time.

- Trained ML models (Random Forest, SVM, KNN) using NSL-KDD dataset and achieved significant accuracy improvement with optimized feature selection.
- Published at Jadavpur University Symposium (2024) following peer review.
- Tech Stack: Python, Scikit-learn, Pandas, Matplotlib

Project Chronos – AI-Powered Internet Slang Analyzer

An AI-based web application that decodes obscure internet slang, revealing historical, linguistic, and visual context.

- Engineered a multi-step AI pipeline using Google Gemini and Custom Search APIs.
- Tech Stack: Python, Streamlit, Google Gemini API, Google Custom Search API, Git/GitHub

Smart Medicine Return and Pharmacy Finder Platform

- This project is a cross-platform (Flutter) application demonstrating a full-stack solution to solve medicine disposal and supply chain visibility issues using real-time cloud services.
- [Flutter, Firebase, APIs]

Yoga Pose Search – Google AI Project

Built a pose-recognition prototype that detects and identifies yoga postures using AI.

- Utilized computer vision and pose estimation techniques.
- Tech Stack: Python, OpenCV, Google AI Tools

Hybrid Predictive Maintenance using Enhanced CMAPSS NASA Dataset

Designed an ML model for predictive maintenance of industrial equipment using NASA’s CMAPSS dataset.

- Focused on early fault detection using hybrid ML models.
- Tech Stack: Python, Pandas, Scikit-learn