Astubh Mishra

9653759454 | astubh@gmail.com | linkedin.com/in/astubh-mishra | github.com/Astubh

Education

Army Institute of Technology — Pune, Maharashtra
Bachelor of Engineering in Computer Science, CGPA: 8.18/10 — *Aug 2023 – Present*

Shiv Jyoti International School — Kota, Rajasthan
Class 12th: 80.5% — *Jun 2022*

Projects

ArcadeRush | *HTML, CSS, JavaScript, Django* | *Link* — Jan 2025
- 15 Online Games such as Sudoku, Minesweeper, Tower of Hanoi using HTML, CSS and JavaScript
- Tested by 150+ users.

Network Intrusion Detection | *Python, Wireshark, NumPy, Pandas, Scikit-Learn, Seaborn* | *Link* — Nov 2024 - Jan 2025
- Monitors and detects malicious activities or policy violations in network traffic to enhance cybersecurity.
- Anomaly detection, classification algorithms, network traffic analysis.

Email Spam Detection Model | *Python, Google APIs, Scikit-learn, Pandas, NumPy, Streamlit* | *Link* — Sep 2024 - Oct 2024
- Built a spam detection model using NLP and machine learning, achieving an accuracy of 89.9%.
- Implemented feature extraction and data processing with Python, Google APIs, and Scikit-learn.

Coalmine Lifetime Detection System | *Python, Matplotlib, NumPy, Pandas, Scikit-Learn* | *Link* — Sep 2024
- Predicts the safe excavation depth, potential structural weaknesses, and hazardous conditions (e.g., high methane levels, high temperatures) using real-time sensor data.
- Threshold-based anomaly detection, sensor data analysis, predictive modeling.

Anomaly Detection in Coalmines | *Python, Random-Forest, NumPy, Pandas, Scikit-Learn* | *Link* — Sep 2024
- Detects anomalies in coal mine structures and rooftops to ensure safety by analyzing sensor data for unusual patterns.
- Anomaly detection, Random Forest algorithm, real-time data analysis.

Facial Emotion Recognition System | *Python, Numpy, Pandas, OpenCV, Tensorflow* | *Link* — Apr 2024 - May 2024
- Identifies and classifies human emotions (e.g., happy, sad, angry) from facial expressions using image data.
- Computer vision, Convolutional Neural Networks (CNNs), image preprocessing, emotion classification.

Sudoku Solver | *Python, Streamlit* | *Link* — Feb 2024 - Mar 2024
- Created a Python-based Sudoku Solver and Generator with a Tkinter GUI.
- Features interactive puzzle creation, solution solving, and visual representation.
- Incorporated Data Structure and Algorithm concepts like backtracking, constraint propagation, DFS, greedy heuristics, hashing, bit-masking, and graph representation.

Achievements

Competitive Programming
- Solved 350+ coding problems across various topics of Data Structures and Algorithms on Leetcode. | *Profile*

Smart India Hackathon 2023 Winner — Dec 2023
- Awarded in the Disaster Management category for developing a web-based application that predicts explosion threat zones in oil and gas industries using a TensorFlow-based regression model.

Skills

Languages: Python, C++, JavaScript, HTML, CSS
Frameworks: Tensorflow, Pytorch, Streamlit, Tkinter
Developer Tools: Git, Docker, LaTeX, Google Cloud Platform, VS Code, Visual Studio, Blender, GraphViz, Canva, Colab
Libraries: Pandas, NumPy, Matplotlib, Scikit-learn, GoogleAPIclient
Concepts: Data Structures and Algorithms, Object-Oriented Programming, Natural Language Processing, Machine Learning, Deep Learning
Soft-Skills: Effective Communication, Team Collaboration, Adaptability, Creativity, Critical Thinking, Growth Mindset

Programmes

IDE Boot-camp Phase III by AICTE and MIC — May 2024
- Showcased our team's SIH-winning project to industry leaders from the Wadhwani Foundation and the Chairman of the Ministry of Education.

Role of Responsibility

Joint Secretary at Information Security And Digital Forensics Club — Oct 2024 – Jun 2025
- Conducted various Capture the Flag Events as the Technical Lead.
- Attended Various seminars on Network Intrusion and Safety.