Amlan Anshuman Nayak

Bhubaneswar, Odisha

Education

Siksha 'O' Anusandhan Deemed to be University, Bhubaneswar

2023 - 2027

Bachelor of Technology in Computer Science and Engineering (CGPA - 9.73)

Bhubaneswar, India

Guidance English Medium School

2023

AISCCE - CBSE, Science (PCM) (Percentage - 79.2%)

Bhubaneswar, India

Ruchika High School

2021

CISCE - ICSE (Percentage - 92.5%)

Bhubaneswar, India

Relevant Coursework

• Data Structures & Algorithms(DSA)

• Data Science

• Object Oriented Programming

• Natural Language Processing(NLP)

Projects

Finance Management System 🗷 | Java, OOP, Data Structures, File and Exception Handling

- Developed a Java-based finance management system to track income, expenses, and budgeting using OOP principles (Encapsulation, Inheritance, Polymorphism) for scalability.
- Implemented efficient transaction management using ArrayList & HashMap for storage, Stack & Queue for undo/redo, and file handling for persistence.
- Integrated exception handling to ensure data integrity and built an interactive console-based interface for seamless financial tracking.
- https://github.com/CODER-AMLAN/Finance-Management-System

GDP Analysis System 🗷 | Python3, Pandas, NumPy, Matplotlib, Plotly

- Designed a data-driven system to analyze GDP trends (1960–2018) across 56 countries, handling missing values and ensuring data consistency.
- Computed GDP growth rates and performed Exploratory Data Analysis (EDA) to identify economic patterns and correlations.
- Developed interactive visualizations using Plotly, enabling bulk graph generation and comparative analysis between major economies
- https://github.com/CODER-AMLAN/GDP-Analysis-System

Human Activity Recognition Model | Python3,ML,Sklearn,Pandas,NumPy,Matplotlib

- Developed a machine learning model to classify human activities (e.g., Walking, Sitting, Standing) using smartphone sensor data (accelerometer and gyroscope). Implemented data preprocessing, feature engineering, and model tuning to enhance accuracy
- Preprocessed time-series sensor data (3-axial acceleration & angular velocity) using filtering, windowing, and feature extraction techniques.
- Built and optimized multiple ML models (Logistic Regression, Decision Tree, SVM, Random Forest) with Hyperparameter Tuning & Cross-validation for high classification accuracy.
- Performed EDA to detect patterns, remove anomalies, and extract time & frequency domain features for improved model generalization.
- https://github.com/CODER-AMLAN/Human-Activity-Recognition-Model

Technical Skills

Languages: Python3, Java, SQL

Developer Tools: VS Code, Anaconda, Intellij Idea, Git, Github, Jupyter Notebook

Technologies/Frameworks: NumPy, Pandas, Matplotlib, Sklearn, Plotly

Extracurricular Activities

- Member, CODEX Club, SOA (Jan 2025 Present) Contributing regularly to the club's CODEX GitHub repository by solving and submitting LeetCode problems using Java.
- LeetCode Problem Solver Regularly practice DSA with a strong problem-solving mindset.
- Hackathons & Team Leadership Led a team in multiple national-level hackathons, including HackerWars, SIH Internal Hackathon (Top 30), and CraftNCode Finalist, fostering collaboration and strategic problem-solving.