# ARITRA PATTANAYAK

#### Panipat, Haryana

#### Education

## Kalinga Institute of Industrial Technology

B. Tech - Computer Science and Engineering (CGPA - 7.4)

October 2021 – Present

Bhubaneswar, Odisha

## Delhi Public School, Panipat Refinery

Senior Secondary Percentage – 87% June 2019 - May 2021

Panipat, Haryana

## Relevant Coursework

- Data Structures and Algorithms(DSA)
  Operating Systems
- Cloud Computing
- Software Engineering
- DBMS

- OOPs
- Machine Learning
- Big Data

- Artificial Intelligence
- Data Analytics
- Computer Networks

## **Projects**

### Speech Buddy | React, Web Speech API, Tailwind CSS, Recoil

November 2024

- Developed a React-based web application enabling users to practice spoken English interactively.
- Utilized Web Speech API for real-time speech recognition and transcription accuracy.
- Designed a modular frontend with **Tailwind CSS** for a responsive, visually appealing UI.
- Implemented robust features like random sentence generation, speech-to-text conversion, and feedback analysis.
- Conducted extensive testing for transcription accuracy, cross-browser compatibility, and performance.

# CO2 Emission Predictor | Python, Scikit-learn, TensorFlow, Flask

April 2024

- Developed a model to **predict CO2 emissions** based on engine size and no. of cylinders.
- Leveraged various ML models, including Multiple Linear Regression, KNN, Decision Tree, Random Forest, SVM and Passive Aggressive Regressor, to drive accurate predictions.
- Implemented Neural Networks using Keras, successfully training and fine-tuning models for a dataset of over 1K records.
- Accurately predicted the CO2 emissions using Random Forest model, attaining R<sup>2</sup> value of 0.70

#### Fake News Detection | Python, Scikit-learn, NLTK, Flask

January 2024 - March 2024

- Developed a model to classify news as real or fake.
- Leveraged various ML models, including Naive Bayes, KNN, Logistic Regression, SVM, Random Forest, Passive Aggressive, and Gradient Boosting, to achieve accurate classification on a dataset of over 40,000 records.
- Accurately classified the news using Random Forest model, attaining accuracy value of 0.997

#### **Technical Skills**

Languages: C, C++, Java, Python, HTML/CSS, SQL

Technologies/Frameworks: Scikit-learn, NumPy, Pandas, TensorFlow, Matplotlib, Streamlit Developer Tools: VS Code, Git, GitHub, Jupyter Notebook, Google Collab, Kaggle, PyCharm

#### Certifications

- Problem Solving (Basic) HackerRank
- Problem Solving (Intermediate) HackerRank
- Generative AI: Introduction and Applications coursera
- Generative AI: Prompt Engineering Basics coursera
- Prompt Engineering for ChatGPT coursera