# Tushar Kumar

Portfolio: portfolio.com Github: github.com/kumartusha

## EDUCATION

## Tulsi Ram Maheshwari Public School

Higher and Intermediate School - PCM

# Dr. Kedar Nath Modi Institute of Engineering and Technology

Bachelor of Technology - Computer Science and Engineering; GPA: 8.25 July 2021 - June 2025 Courses: Artificial Intelligence, Data Structures, Analysis Of Algorithms, Machine Learning, Networking, Operating Systems, Databases

## SKILLS SUMMARY

• Languages:	Python, C++, SQL
• Frameworks:	Flask, Streamlit, Pandas, Seaborn, Langchain, Scikit-learn, NLP, Tensorflow, Keras

- MySQL, SQLite, VS Code, Git & GitHub, Google Collab, PowerBI, Jupyter Notebook • Tools:
- Soft Skills: Leadership, Event Management, Writing, Public Speaking, Time Management

## EXPERIENCE

## **Anudip Foundation**

- Data Science (AI-ML) Trainee (Full-time)
  - Training Period: Pursuing a 3-month program, focusing on Data Science and Machine learning with Python.
  - Data Visualization: Finding insights using Matplotlib, Seaborn, and Pandas for effective visualization analysis.
  - Machine Learning Tools: Hands-on experience with Scikit-learn, TensorFlow, NLTK and algorithms.

### Cognifyz Technology

- Machine Learning Intern (Part-time)
  - Analysis & Development: Analyzed data & finding insights that helped in making informed and effective decisions.
  - Hands-on Machine Learning: Created project based on supervised, snsupervised and natural language processing.

#### Projects

#### • Gold Price Predictive Model **O**:

- Leveraged RandomForestRegressor to predict gold prices, achieving an impressive R<sup>2</sup> score of 98.89%.
- Scaled features using **StandardScaler** for uniform data **distribution**, improve performance for gold price prediction.
- Through heatmaps, scatterplots, and distribution plots, finding patterns and relationships in gold price..
- Stock Market Prediction Model **Q**:
  - Built a model using RandomForestRegressor and technical indicators like Moving Averages and RSI.
  - Preprocessed data and features to boost prediction accuracy, achieving a low Mean Absolute Error (MAE).
  - Evaluated model **performance** and visualized predictions, comparing them with actual **stock prices** for accuracy.

#### • Neurodegenerative Disorder Prediction System Q:

- Build a model using Support Vector Machine (SVM) to predict Parkinson's disease, with 89 % accuracy.
- Preprocessed data by scaling features with **StandardScaler** and optimizing model performance through train-test split.
- Utilized SVC model to enhance prediction accuracy, leveraging key clinical features for effective disease diagnosis.

## • FakeFinder: AI-Driven News Verifier **Q**:

- Implemented a model using Logistic Regression with TF-IDF Vectorization for effective feature extraction
- Utilized **NLTK** for stopword removal and stemming to preprocess and clean textual data.
- Achieved a 97.91% accuracy by optimizing model performance through train-test splitting and rigorous evaluation.

## • Brain Stroke Prediction Model Q:

- Achieved 95.5% accuracy in predicting stroke risks using XGBClassifier, LightGBM, and RandomForest models.
- Improved detection by tackling class imbalance with **SMOTE**, boosting both precision and recall
- Tested various models like Logistic Regression and VC Models to ensure balanced and reliable predictions.

# VOLUNTEER EXPERIENCE

Community Volunteer for Google Cloud Arcade Program'24

Managed a community of 1000+ members, offering guidance and support in program.

Kolkata, India July 2024 - Sep 2024

Technical Coordinator for College Functions and Events Coordinated college events and activities, ensuring smooth execution and student engagement.

Kolkata, India Jan 2018 - Present

Ghaziabad (UP) May 2019 - April 2021

Ghaziabad (UP)

Oct 2024 - Jan 2025

Offline

Remote

Jan 2025 - Present