

Ujjwal Kumar

+91-7061845104 | Ujjwal.kumar.id@gmail.com | [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

EDUCATION

Bachelors of Technology in Electronics and Communication

CGPA: 7.9 (upto 5th sem)

Maharaja Agrasen Institute of Technology, Delhi

2022 - ongoing

PROJECTS

Spam email classifier | [GitHub](#)

- Preprocessed text data using NLP (tokenization, lemmatization, stopword removal).
- Applied **CountVectorizer** with n-grams (1, 2) for feature extraction.
- Handled class imbalance with **SMOTE**.
- Built and trained a **Multinomial Naive Bayes** model.
- Tuned model using **GridSearchCV** for optimal performance.
- Deployed model and vectorizer with **joblib**.

Custom segmentation model | [GitHub](#)

- Preprocessed data using **StandardScaler** and **OneHotEncoder** for clustering.
- Applied **K-Means clustering** to segment customers based on purchasing behavior.
- Optimized clusters using **Elbow Method** and **Silhouette Score**.
- Reduced dimensionality with **PCA** and visualized clusters with **Matplotlib** and **Seaborn**.

Estate price predictor | [GitHub](#)

- Built a model to predict real estate prices using **Linear Regression** and **Random Forest**.
- Preprocessed data, handled missing values, and performed feature engineering.
- Achieved an **R² score of 0.64** (Linear Regression) and **0.73** (Random Forest).
- **Tools/Technologies:** Python, Pandas, Scikit-learn, Matplotlib, Seaborn

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, C++
- **Frontend:** React.js, TailwindCSS, HTML, CSS
- **Machine learning:** NLP, Supervised & Unsupervised algorithms
- **Misc:** Flask, Streamlit, SQL, Git