# Thota Venkat Mani Sankar Sai Gautam

Bachelor of Technology Computer Science Engineering Indian Institute of Information Technology Sricity +91-8309042344 vikkygautam0503@gmail.com github.com/vikk456

### **EDUCATION**

| Degree/Certificate | ${\bf Institute/Board}$                    | CGPA/Percentage   | Year     |
|--------------------|--|-------------------|----------|
| B.Tech., CSE       | Indian Institute of Information Technology | 8.5[upto 4th sem] | 2027     |
|                    | Sricity                                    |                   |          |
| Senior Secondary   | Tirumala Junior College                    | 975/1000          | May 2023 |
| Secondary          | Sri Gowthami Smart School                  | 600/600           | 2021     |

#### **PROJECTS**

## • SMS Spam Detection

Tools: Python, Scikit-learn, XGBoost, Pandas, Jupyter Notebook



- Developed a machine learning-based system to classify SMS messages as spam or ham using the popular SMS Spam Collection dataset.
- Implemented Naive Bayes and XGBoost classifiers after preprocessing and vectorizing the text data with CountVectorizer.
- Created evaluation pipelines using accuracy score and achieved up to 98.3% accuracy with the Naive Bayes model.
- Applied model comparison to analyze the effectiveness of different classifiers for binary text classification.

## · Hate Speech Detection using NLP and Machine Learning

Tools: Python, Pandas, Scikit-learn, CountVectorizer, Logistic Regression, Naive Bayes



- Designed a text classification pipeline to detect hate speech in tweets using supervised learning techniques
- $\circ$  Integrated 'CountVectorizer' and 'TfidfVectorizer' for feature extraction, applying regex-based text preprocessing
- $\circ$  Evaluated model performance using precision, recall, and F1-score, achieving over 86% accuracy with logistic regression
- Compared Bernoulli Naive Bayes and Logistic Regression classifiers to select the best-performing model

### Credit Card Fraud Detection using KMeans and AutoEncoder

Tools: Python, Scikit-learn, TensorFlow, Pandas, Jupyter Notebook



- Built an unsupervised anomaly detection system using KMeans clustering and deep AutoEncoder neural networks
- Scaled anonymized transaction data using StandardScaler and trained AutoEncoder only on normal class
- $\circ$  Detected anomalies using reconstruction error threshold; achieved 60% recall on fraud detection
- Evaluated performance using confusion matrix, precision, recall, and F1-score

## SKILLS

- Programming Languages: C, Java, Python, MySQl
- Technologies: HTML, CSS, JavaScript
- Data Analysis: Pandas, Numpy, Matplotlib
- Machine Learning: Scikit-learn
- Tools PLatforms: Git, Jupyter Notebook, VS Code
- Soft Skills: Problem-Solving, Team collaboration, Time management

### **CERTIFICATIONS**

- Corizo, Artificial Intelligence
- Coursera, Supervised Machine Learning: Regression and Classification
- Coursera, Advanced Learning Algorithms
- Coursera, Unsupervised Learning, Recommenders, Reinforcement Learning