Patakokila Praveen Kumar

SKILLS

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

Technologies/Tools: NumPy, Pandas, Matplotlib, Seaborn, scikit-learn, Keras, TensorFlow, PyTorch, Docker

Developer Tools: Git/Github, Google Colab, Jupyter Notebook, Vs Code

Certifications: Cloud Computing(NPTEL), Complete Interview Preparation(GeeksforGeeks), Generative AI(Coursera),

Data Structures and Algorithms (Udemy), Design and Analysis of Algorithms (Coursera)

EXPERIENCE

Machine Learning Engineer

Sept 2024 - Nov 2024

Acadomer (Online)

- Skill Development: Mastered Python and advanced machine learning techniques, completing 50+ hours of focused training on practical ML concepts and real-world applications.
- Heart Disease Prediction Project: Built a machine learning model to predict heart disease, achieving a high 87% accuracy using SVM on a dataset of 1,000+ records. Enhanced model accuracy through feature selection and tuning.

PROJECTS

Image Classification using CNN

Machine Learning

- Achieved 89% test accuracy in multi-class image classification across 8 categories (airplane, car, cat, dog, flower, fruit, motorbike, person) using a CNN model.
- Processed 6,000+ training and 1,000+ testing images with data augmentation techniques (rotation, zoom, shift) to improve model generalization, enhancing overall performance by 6%.

POS Tagging and Spellchecking with Hybrid Model

Natural Language Processing

- Achieved 75.8% POS tagging accuracy by integrating BiLSTM for POS tagging with probabilistic spellchecking, surpassing the standalone BiLSTM model's 71.7%.
- $\circ\,$ Reduced spelling errors using probabilistic spellchecking, improving POS tagging performance.
- Enhanced F1-score to 0.74, outperforming the CRF model's F1-score of 0.67, demonstrating improved precision and recall.

PUBLICATIONS

Natural Language Processing Research

o "Integrating Probabilities Models and Neural Networks for Enhanced Part-of-Speech Tagging and Spellchecking in Telugu" Accepted and published in the *Hinweis International Conference on Recent Trends in Engineering and Technology (RTET)*, Conference Proceedings, indexed by Scopus and Crossref.

EDUCATION

Lovely Professional University

Bachelor of Technology in Computer Science and Engineering

o CGPA: 7.8/10.0

Sasi Junior College

 $Intermediate\ (MPC)$

o Percentage: 94%

Sept 2022 – Present Punjab, India

Sept 2020 – Sept 2022 Andhra Pradesh, India