

Akula Hema Venkata Sriram

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in LinkedIn 🌐 GitHub

SKILLS

Programming Languages: C++, Java, Python, C, 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 ([GFG](#)) [🔗](#), Generative AI(Coursera)

EXPERIENCE

Machine Learning Engineer

Sept 2024 - Oct 2024

Acadomer (Online)

- **Skill Development:** Completed 50+ hours of training on practical ML concepts and its applications.
- **Breast Cancer Detection:** Built a machine learning model to classify breast cancer instances as malignant or benign based on various features such as tumor size, texture, and smoothness. ([Project Link](#)) [🔗](#)
- **Model Evaluation and Analysis:** Evaluated model performance for breast cancer detection, achieving an accuracy of 97.66% with Logistic Regression and 97.08% with Random Forest, demonstrating high reliability.

PROJECTS

Part-of-Speech Tagging and Spellchecking in Telugu ([Project Link](#)) [🔗](#)

Machine Learning

- Achieved 75.8% POS tagging accuracy by integrating BiLSTM for POS tagging with probabilistic spellchecking, surpassing the standalone BiLSTM model's 71.7%.
- 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.
- **Tools and Technologies:** Used Python, IndicNLP, Stanza, Scikit-learn and Matplotlib.

Customer Churn Prediction

Machine Learning

- Created a model to analyze and compare machine learning models for the prediction of telco churn.
- **Models Used:** Random Forest Classifier, XGboost, Decision Tree Classifier
- SMOTE-ENN is used for handling the imbalanced data. The RandomForest consistently outperformed other models in terms of accuracy, precision, recall, and F1-score (95%).
- **Tools and Technologies:** Utilized Python, imblearn, Scikit-learn, and Matplotlib.

PUBLICATIONS

Natural Language Processing Research

- "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

Sept 2022 – Present

Punjab, India

- CGPA: 8.9/10.0

Sasi New Gen. Junior College

Intermediate (MPC)

Sept 2020 – Sept 2022

Andhra Pradesh, India

- Percentage: 97.1%