Tadala Srihari Tanmay Karthik

+1 971 706 4246 karthiktadala@gmail.com Karthik Tadala KarthikTadala

Education

Master of Science, Computer Science — **Portland, Oregon**
Portland State University — *September 2023 - December 2024*

Bachelor of Technology, Computer Science — **Visakhapatnam, India**
Jawaharlal Nehru Technological University, Kakinada — *June 2019 - April 2023*

GPA: 3.6/4.0

Professional Skills

Languages: C++, Python, SQL, Java, Javascript, R
Technologies/Libraries: Linux, Git, Keras, Tensorflow, Pytorch, Devops, AWS, React
Coursework: Operating Systems, Data Structures and Algorithms, Algorithms and Analysis, Machine Learning and Deep learning, Database Management Systems

Experience

Hindustan Petroleum Corporation Limited — **Vizag, India**
Software Developer Intern — *April 2023 - July 2023*

- Developed a Anomaly Detection model for oil refinery pipelines using machine learning
- Achieved an accuracy of 95.93 % for various machine tag which is used to predict the false flag and report the user
- Created a website for an annual event named Vijayotsvam which had 3000+ registrations.
- Meet release targets for test planning and execution, test scripts, regression testing, peer review, raising risks and issues

Projects

Information Extraction from Financial Documents | *Python, NLTK* — **December 2022 - April 2023**

- Developed a financial Named Entity Recognizer with an accuracy of 92% using Conditional Random Fields
- Enhanced existing question-generation and answer-extraction modules to incorporate information from financial NER; ROUGE-L score of answer-extraction module increased from 0.909 to 0.969

Text Summarization | *Tensorflow, Python* — **July 2022 - October 2022**

- Designed a extension to gather input from users and adeptly create concise and effective summaries of the provided text
- Users can input text data, upload a file, or share a Wikipedia URL as their source
- The project aimed to summarize the input within 50 words
- Conducted rigorous testing and validation processes to ensure the robustness and reliability

Whisper and Emotion Recognition using LSTM | *Tensorflow, OpenSMILE, Python* — **March 2022 - May 2022**

- Extracted hand-crafted features using the OpenSMILE toolkit and trained separate Multilayer perceptron models to detect emotions (happy, sad, anger, neutral) and whisper
- Log-filter bank energies were used to train an LSTM model to detect whisper
- Observed LSTM to efficiently capture previous context and predict whisper with higher accuracy on long audios
- Achieved 15% relative improvement by fine-tuning the whisper recognition model with individual user training data

Heart Attack Prediction Using Logistic Regression | *Tensorflow, Python* — **October 2021 - January 2022**

- Utilized patients' historical medical records as input, this project analyzes essential features to predict the occurrence of heart attacks
- Successfully designed and implemented a Logistic regression model with a remarkable 90.16 % success rate in predicting outcomes.
- Involved in Preparing Test Cases and Test Reports, Ability to work in a team and Independent

Covid-19 Tracker | *React, HTML, CSS* — **July 2020 - August 2020**

- Researched and gathered data on the spread of COVID-19 from reliable sources
- Developed a user-friendly interface for the app using React Native
- Engineered search functionality to facilitate efficient contact search by name or phone number, resulting in a 60 %
- Implemented features such as real-time statistics, maps, news updates, and safety tips
- Designed a heat-map UI based on student's location and tracking possible exposure

Symbol recognition and Text file generation for Latex environment | *LaTex, Python* — **March 2020 - June 2020**

- Developed a machine learning system to recognize mathematical symbols and generate corresponding LaTeX code
- Implemented and trained a convolutional neural network to recognize the symbols in images; Achieved 93% accuracy
- Developed a natural language processing model to convert the symbols into LaTeX code; Achieved code accuracy of 88%