Ganesh Mahadev Udata

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Education

Blekinge Institute of Technology Karlskrona   Jan 2023 – June 2024
Master's in Computer Science

Jawaharlal Nehru Technological University Hyderabad   2019 – 2023
Bachelor's in Computer Science   *8.23 CGPA*

Experience

Master Thesis Student   Jan 2024 to Present
Ericsson, Karlskrona

- As a Master Thesis Student I am currently working on providing Actionable insights on ITSM data, by building a LLM chat application using LangChain and OpenAI that can provide the insights for an incident selected.

Research Intern in Machine Learning   Aug 2022 to Oct 2022
Centella Scientific Pvt Ltd

- As a Research Intern conducted research on prediction of ADMET properties. Where I have done literature surveys to explore the prior research on these properties. Developed RF and XGB model to predict Extraction (E) property.

Projects

Language Detection using Traditional ML Techniques | *Python, ML*   January 2024

- Developed a ML model using traditional ML techniques like RF, XGB and also proposed our new ensemble model by combining SVM and Naive Bayes.

Real-Time Credit Card Fraud Detection | *Python, ML*   November 2023

- Developed a real-time credit card fraud detection system utilizing a Flask backend and machine learning to protect against unauthorized transactions. Built a user-friendly web interface for transaction input and fraud risk assessment.

Cryptocurrency Price Prediction Decision Support System | *Python, ML*   May 2023

- The project's main goal is to compare the Cryptocurrency price predicted using various machine learning algorithms like RF, GRU, LSTM, and XGBoost for short-term prediction.

Why So Harsh | *Python, ML*   March 2023

- Build machine learning models that can classify bad text comments. The purpose of this project is to create models that can help identify and flag inappropriate or harmful comments online, potentially assisting in improving online communities' overall tone and safety.

- Pre-processed the data by using natural language processing (NLP) techniques to extract relevant features from the text data. Then used these features to train the classification model to predict the class of the comments.

Stimulation of Optimized Load Balancing and User Job Scheduling   January 2023
using Cloudsim | *Java, Cloud*

- The project focuses on allocating cloud resources to servers using Partition-based load balancing algorithm and uses swing API for GUI for visualization of cloud activities.

- The project's main idea is to detect one or more drones appearing at some point in a video sequence where birds and other distracted objects may also be present, together with motion in the background done by image classification using CNN.

Technical Skills

Languages: C, C++, Python, Java, SQL, HTML, CSS

Developer Tools: MS Excel, VScode, Git, GitHub, Flask, Linux, Microsoft Powerbi

Database: MySQL, MongoDB

Libraries/Frameworks: Numpy, Pandas, Sklearn, TensorFlow, Streamlit, OpenAI, LangChain

Course and Research Work

Artificial Intelligence and Machine Learning

- Learnt the basics of AI, including how to represent knowledge, conduct graph searches, and perform data mining. Additionally, I have delved into the essential concepts of Machine Learning, such as supervised, unsupervised, and reinforcement learning, with a special emphasis on deep learning and neural networks.

Detection of crop boundaries and identification of crop types using multi-spectral images.

- Conducted a concrete design for an empirical study by identifying research gap,formulated research questions, related work, identified the limitations of the study and also assessed risk management techniques and documented a research proposal keeping master thesis in mind.

Evaluating the maintainability of ArtOfIllusion using a GQM based empirical study

- Created a measurement framework based on GQM principles, planned and executed an empirical study, and subsequently chosen and applied appropriate metrics to assess a software quality attribute of ArtOfIllusion.

Threat modeling for a web application called OWASP Juice Shop

- Created a comprehensive report that encompasses the application's breakdown, a detailed Data Flow Diagram (DFD), categorization of threats according to the STRIDE model, and the corresponding mitigation strategies.

Major Courses

- Data Structures
- Research Methodology
- Decision Support System
- Software Methodology

- DBMS
- Computer Architecture
- Computer Networks
- Compiler Design

- Software Metrics
- Machine Learning
- Artificial Intelligence
- Unix

- Software Security

Certificates

- Introduction to Python Programming – Microsoft Technology Associate
- Machine Learning course completion certificate by Remark Skill Education
- Crash course on Python by Google