SANDEEP PALLERI

EDUCATION

CMR ENGINEERING COLLEGE **July 2024**
Bachelor of Engineering in Computer Science and Engineering Medchal, Hyd
Specialization in Artificial Intelligence and Machine Learning
Cumulative GPA: 7.63/10

PROJECTS

DYNAMIC IMAGE GENERATION FROM TEXT PROMPT **Feb 2024**

- Developed a novel text-to-image generation system using deep learning models (e.g., stable diffusion, transformers).
- Enabled users to generate high-quality images directly from textual descriptions, improving accessibility and fostering creativity.
- Leveraged deep learning frameworks (e.g., TensorFlow, PyTorch) and libraries (e.g., NLTK, OpenCV) to develop a text-to-image generation system utilizing stable diffusion and transformer models for high-quality image creation from textual descriptions.

VISUAL OBJECT DETECTION IN IMAGES **July 2023**

- Implemented real-time object detection using pre-trained YOLOv3 model and COCO dataset, achieving accurate detection and classification of multiple objects in diverse scenarios.
- Optimized system efficiency through batch processing, frame size reduction, and non-maximum suppression, resulting in faster processing and cleaner output.
- Developed a visually appealing object detection system with unique class-specific colors, enhancing user experience and interpretability of the detected objects.

PHISHING WEBSITE DETECTION USING MACHINE LEARNING **Apr - Jun 2023**

- Developed a user-friendly Streamlit web application empowering users to independently verify the authenticity of URLs, enhancing online safety practices.
- Created a Phishing Websites Detector using various machine learning algorithms, such as decision trees, Random Forests, and KNN, to accurately identify malicious URLs. Tools Used: HTML, CSS, JAVASCRIPT, NUMPY, PANDAS etc.

HAND GESTURE CONTROLLED ROBOT **Apr - May 2022**

- Designed and implemented a cutting-edge hand-gesture control interface for a car-robot, revolutionizing the way users navigate and interact with the system.
- Developed a robust electronic and mechanical system, integrated with a programmable interface controller, to ensure precise and responsive control of the robot.
- Transformed user experience by creating an innovative controlled assist system, enhancing safety and efficiency in navigating the car-robot.

SKILLS

Programming Languages: C++, Python, SQL, HTML, CSS**,** JavaScript

Packages: NumPy, Pandas, Plotly, Seaborn, NLTK, Spacy, OpenCV, NLP, Matplotlib

Data Science Pipeline: Analysis, Visualization, Cleaning, Modeling, Machine Learning

Tools: Tableau

CERTIFICATIONS AND PUBLICATIONS

- Published research paper, "Dynamic Image Generation From Text Prompt," in the Journal of Technology (Volume 12, Issue 6, 2024).
- Certified by Surge Classes Data Science and AI Campus Program.
- Certified by Google for completion of Google Advanced Data Analytics
- Certified by Spoken Tutorial for completion of Advance C++, Java, Python Training.
- Introducing Robotic Process Automation