Sathvika Kolisetty

937-580-8466 | sathvika.kolisetty09@gmail.com | linkedin.com/in/sathvikakolisetty22 | github.com/satvikakolisetty

Education

University of Dayton - Dayton, OH GPA: 3.9/4
Master of Computer Science *Aug 2022 – May 2024(Expected)*

SRM Institute of Science and Technology - Chennai, India GPA: 9.24/10
Bachelor of Technology in Computer Science and Engineering *June 2018 – May 2022*

Technical Skills

Programming/Query Languages: Python, C/C++, HTML, CSS, Bash Shell Scripting
Databases : My SQL, MSSQL, MongoDB
Machine Learning Algorithms: Regression, Ensemble Learning, Clustering, Reinforcement Learning, Classification (Decision Trees, Random Forest, Naive Bayes, SVM), Principal Component Analysis (PCA), Artificial Neural Networks, Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN), Long Short-Term Memory (LSTM)
Natural Language Processing : Stemming, Lemmatization, Word Embedding, Sentiment Analysis, Recommendation Systems, Text Classification
Libraries: Pandas, NumPy, Matplotlib, Seaborn, Tensorflow, pyTorch, NLTK, Scikit-Learn
Developer Tools: Git, Docker, Kuberenetes, AWS Cloud, Google Cloud Platform

Experience

Automation Developer Intern March 2022 – August 2022
Linux World Informatics Private Limited *Jaipur, India*

- Developed Dockerfile for a container image with Python 3, Keras, and numpy, Configured Jenkins for GitHub integration to pull repositories on push events and Automated model deployment in Jenkins to start ML software interpreter Docker container based on code analysis.
- Orchestrated model training and evaluation in Jenkins, followed by automatic architecture tweaking if accuracy dropped below 90%.
- Implemented model retraining and notification process, along with container monitoring and recovery to ensure continuous operation.

Infrastructure Automation Intern February 2020 – July 2020
Linux World Informatics Private Limited *Jaipur, India*

- Designed and implemented secure and scalable AWS environments for web applications, integrating EC2 instances, security groups, S3 buckets, and CloudFront distributions.
- Implemented CloudFront CDN to enhance content delivery performance globally, reducing latency and improving user experience by distributing images from an S3 bucket across multiple edge locations.
- Enhanced efficiency by integrating GitHub repositories into the deployment pipeline, facilitating seamless fetching and deployment of application code updates, while ensuring adherence to industry best practices and security standards.

Projects

Image Captioning Using Vision Encoder Decoder | *Vision Transformers, GPT-2, Hugging Face Transformers*

- Developed an image captioning system combining Vision Transformers (ViT) and GPT-2 models, resulting in a 92% enhancement in caption generation accuracy.
- Employed the Flickr8k dataset, comprising 8,000 images with five human-generated captions each.
- Implemented a Vision Encoder Decoder Model for image captioning and integrated ViT and GPT-2 to enhance image understanding and caption coherence and Achieved 92% accuracy in model evaluation using the Rouge2 metric.

Secure E-Voting Systems | *Convolutional Neural Networks (CNN), ATmega328-based Arduino.*

- Implemented and optimized biometric identification techniques using fingerprint scanners and machine learning algorithms, resulting in a highly accurate and secure voter identification system.
- Demonstrated proficiency in CNN architectures, including Alex Net and VGG-16, to achieve a 98.45% accuracy rate in face identification, surpassing alternative algorithms and significantly enhancing the voting process's reliability.
- Successfully integrated hardware components, including an ATmega328-based Arduino, to enable real-time finger detection, contributing to the overall effectiveness of the voter identification and privacy protection system.