SANJAY KUMAR VONTELA

(682) 373-2133• sanjayvontela999@gmail.com • LinkedIn • GitHub • Arlington, Tx

Experience:

Machine Learning Engineer (Internship) Verzeo, Jul 2020 - Aug 2020

- Developed and compared gender classification models based on tweet text using standard Machine Learning techniques, including Naïve Bayes, Decision tree, and Random Forest, achieving a high accuracy of 0.62 with Naive Bayes.
- Designed a transfer learning UNET model for detecting covid 19 in X-ray images, achieving 90.3% accuracy.

Machine Learning Engineer (Internship) Vignanajyothi Institute of Engineering & Technology, Jun 2020 – Jul 2020

- Developed a smart attendance system using Vggface and VGG16 algorithms for facial recognition, considerably reducing attendance-taking time by around 80%.
- Implemented robust data preprocessing techniques to enhance the accuracy of the smart attendance system, optimizing feature extraction and improving recognition performance.

Full Stack Developer (Internship) Elagandal Times, March 2022 – Jul 2022

- Developed an ePaper website with PDF paper display and download functionalities.
- Implemented a user-friendly date selection feature to streamline paper access and retrieval.

Education:

M.S. in Computer Science, University of Texas at Arlington, Arlington, Tx

- Relevant courses: Computer Vision, Machine Learning, Distributed Systems, Design and Analysis of Algorithms, Web Data Management, Data Mining.

B.S. in Computer Science, Sreenidhi Institute of Science & Technology, Hyderabad, IN

- Relevant courses: Object Oriented Programming through Java, Data Structures & Algorithms through C++, SQL, and Python Programming for Data Science, Data Mining, Software Engineering, Cloud Computing.

Projects:

- **Gender Classification Based on Text:** Developed and tested a BERT based machine learning model that classifies the gender based on input tweet/text.
- **Brain tumour Segmentation**: Built a deep learning model trained using VGG16 weights for UNETS architecture that separates tumour from rest of the brain tissue in a MRI image.
- **Backdoor using python:** A networking application that allows you to see and change or obtain every application of another system by simply executing a command in their system.
- **Expression Detection:** A deep learning application which uses webcam and a trained model (trained using a dataset of images) to detect expression of a person such as sad, anger, happy, neutral.
- **AI based Security System:** A security system application that uses object detection to detect any weapons in the frame and send alerts to authorities. It analyses threat level by detecting the facial expression of weapon holder.
- **Google Keep clone:** I developed a web application resembling Google Keep, using the React framework.
- **To-Do List:** Developed a To-Do application using HTML, CSS, JavaScript, Node.js, Express for the backend, and MongoDB for efficient data management.
- **8 Puzzle solver:** A python program that solves 8 puzzle using informed and informed search algorithms.

- **Visual Question Answering :** A deep learning project that takes question about the image and returns true or false answer.

Technical Skills:

- **Data Science and Machine Learning:** Python, NumPy, Pandas, Matplotlib, Deep Learning, Computer Vision, PyTorch, Clustering, NLP.
- **Web Development:** NodeJS, React, MongoDB, HTML, CSS, Bootstrap, JavaScript, PHP.
- **Libraries and Frameworks:** Git, Pandas, NumPy, OpenCV, PyTorch, scikit-learn, TensorFlow, Keras, PostgreSQL, Flutter.
- **Operating Systems:** Linux, Windows.

Certifications:

- Certified by Coursera for completing Machine Learning**.**
- Certified by Internshala for completing Ethical Hacking.
- Certified by Coursera for completing a Data Science.
- Certified by Coursera for completing convolution neural network.
- Certified by Cisco for completing Introduction to Networks.
- Certified by Cisco in CCNA.

Publications:

- “Analysis of tumour detection using UNETS and VGG16 weights”, Journal of Medical Pharmaceutical and Allied Sciences**.**