First name : SAI SURYA TEJA Last Name : SAYAPUREDDY



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Gender: Male Date of birth: 23/08/2001 Nationality: Indian

GitHub Profile : <https://github.com/SAYAPUREDDY>

# EDUCATION AND TRAIN**‐**

ING

[ 29/09/2023 – Current ] Technical University Deggendorf

AI for smart sensors and actuators M.eng

Field(s) of study: MachineLearning and DeepLearning,Sensors,Artificial Intelligence,

Robotics,Embedded systems

[09/07/2018 – 09/07/2022] Karunya Institute of Technology and sciences

Mechanical Engineering Btech

City: Coimbatore | Country: India | Field(s) of study: Engineering, manufacturing and construction

# WORK EXPERIENCE

[14/01/2024 – 16/07/2024] ChumsAI pvt.ltd

Python developer

City: Mumbai | Country: India

* API developing using FastAPI
* Utilizing ML and LLM's

[ 01/04/2022 – 30/06/2022 ] Designing engineer

***Worksbot Applications Pvt. Ltd.,*** <https://www.worksbot.com/>

City: chennai | Country: India

* comprehensive training in Solidworks as Design Engineer Trainee
* Assistance in creating detailed design drawings,conducting simulations and troubleshooting design issues.

# PROJECTS

[15/06/2024 – 25/07/2024] Face,Gender and Ethnicity recognizer model

This project builds a model that predicts the gender, age, and ethnicity of individuals based on their facial images. The model is trained on the dataset and employs hyperparameter tuning to find the optimal configuration for the neural network.

Tools: Python,Deep Learning Frameworks,OpenCV,GoogleColab,VScode

[15/06/2024 – 25/07/2024] Face Mask Detection

The main goal of this project is to build a deep learning model capable of detecting whether a person is wearing a face mask or not. The model uses the VGG19 architecture, which is pre-trained on the ImageNet dataset, and fine-tuned for binary classification (mask vs. no mask). OpenCV is utilized for face detection, which enables the identification and classification of faces in images

Tools: Python,Pandas,Numpy,Matplotlib,Scikit-learn,DeepLearning Frameworks,OpenCV,VScode,VGG19

[ 15/04/2024 – 25/06/2024 ]

Improving situation awareness of the robot using Deep Learning Face emotion&Hand Gesture recognition

Developed custom Convolutional Neural Network (CNN) models for face emotion and hand gesture recognition, achieving high accuracy (72.34% and 89.16% respectively) and strong validation performance. Utilizing advanced optimization strategies and real-time data augmentation, I improved model robustness and generalization. Additionally, I compared Haar cascades with YOLO detection methods to balance accuracy and resource efficiency, demonstrating my expertise in deep learning and computer vision for human- computer interaction applications.

Tools: Python,Deep Learning Frameworks,OpenCV,GoogleColab,VScode

[Current] ChumsAI- 3D virtual Companion

# LANGUAGE SKILLS

DIGITAL SKILLS

As a Python Developer at ChumsAI, I specialize in designing and maintaining high- performance APIs using FastAPI to support our advanced 3D virtual companions. My role involves developing backend services, managing databases. My proficiency in Python, FastAPI, and database management, combined with strong problem-solving skills and a collaborative mindset, ensures the delivery of reliable and efficient software solutions.

Tools: Python,FastAPI,MongoDB

# Mother tongue(s): Telugu

Other language(s):

# German – A2

# English – C1

# Hindi – C1

*Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user*

My Digital Skills

Python | Frameworks & Libraries: OpenCV, Sci-kit learn, NumPy, Pandas, SciPy, Matplotlib. | Deep Learning frameworks: PyTorch,Tensorflow,Keras | Git | Computer VIsion | ROS(robot operating system) | Linux | Gazebo (Robotics simulator) | Docker | Autodesk Fusion 360 (Optimal knowledge) | HTML, CSS and XML | Backend Development (Docker, Python Django, Python Fastapi, Redis) | Natural language Processing