

KEERTHI RAJ VASIREDDY YUVARAJ

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PROFILE

Computer Engineering graduate with strong Python, C, Java, C++, and React.js skills. Experienced in hybrid car algorithms, Raspberry Pi ball detection (TensorFlow Lite), and real-time face mask detection (Convolutional Neural Networks). Tech enthusiast and team player.

EDUCATION

Masters In Computer Engineering - The University of Texas At Arlington, Texas, USA (GPA – 4.0/4.0) **08/2022 – 05/2024**
Bachelors In Computer Engineering And Data Science - Presidency University, India (GPA – 3.96/4.0) **08/2019 – 06/2023**

SKILLS

- **Programming Languages:** Python; C; Java; MATLAB; C++
- **Front-End Development:** HTML; CSS; React.js
- **Back-End Development:** Flask; Node.js
- **Databases:** MySQL; SQLite; MongoDB
- **Technologies & Operating Systems:** Linux; Raspberry Pi; OpenCV; Microsoft Office;
- **Software & Cloud:** Microsoft Azure; Google Firebase; Heroku; Github; Anaconda; Visual Studio Code; Android Studio; JetBrains

EXPERIENCE

Student Associate – University of Texas at Arlington, Arlington, Texas **03/2023 – Present**

- **Skills:** Communication, Organization, Teamwork, Customer Service, Multi-tasking
- Promoted student assistant to student associate. I now support the Admissions team by answering emails, processing admission applications, and managing the admissions procedure for potential graduate students. In the past, I helped with the undergraduate admissions process by answering calls, emails, and chat queries.

PROJECTS

REEV (RANGE EXTENDED ELECTRIC VEHICLE), SAEINDIA **03/2021 – 08/2022**

- **Skills:** Matlab – Simulink
- The Projects was based on building a hybrid car, the competition was organized by SAEINDIA.
- Designed an algorithm to be implemented on the microcontroller.
- The algorithm was designed on the controlling and sensing of all the sensors along with automatic hybrid conversion.
- MATLAB – SIMULINK was used to implement the algorithm and extracting the code.

Robocon 2022, DD National **02/2022 – 07/2022**

- **Skills:** Raspberry pi, TensorFlow Lite, OpenCV, Data Collection and Transformation
- Ball Detection had to be implemented into raspberry pi for detecting the ball.
- White ball images were captured with different background images in different angles and multiple translations were applied to for more data generation using the python as a tool.
- Applied Deep Learning algorithms like CNN and TensorFlow lite for better accuracy and efficiency.
- OPENCV tracking algorithms like CSRT, KCF, Boosting were more efficient and had better accuracy when compared to DL algorithms due to the low specifications of the Raspberry pi.

Face Mask Detection, Presidency University **07/ 2022 – 07/2022**

- **Skills:** OpenCV, Convolutional Neural Network
- Realtime Detection of mask on the human face was the major motive of this project during the pandemic season.
- Gathered the dataset from the Kaggle website.
- Developed a Convolutional Neural Network from scratch for the model and manipulated the neural network layers based on the dataset size.
- OPENCV was used for the API for detection in real time.

Personal Projects (GitHub)

- Chat Application, Car Price Prediction, iPhone Purchase Predictor

ACTIVITIES & INTEREST

- Secretary of Hindu Yuva Organization at UTA, Volunteers at Mission Arlington – Distributing Packages for Mission Arlington
- Music, Travelling and Technology Insights