Tharun Nagaveera Marthandan

Portfolio: http://tharun.tech/
Github: https://github.com/teslalord/
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EXPERIENCE

Junior Research Engineer | Buddi AI

June 2021 - PRESENT

Worked on automation of medical data processing, creation of data lake and storage system using scala, spark, PostgreSQL

Python Developer Intern | Pianalytix

December 2020 - January 2020

Worked and taught on 8 different projects covering python, Tkinter, Django, image processing etc.

Internet of Things Intern | Pinesphere

February 2021 - March 2021

Worked on an embedded systems product - "Automatic Floor Sanitizer Robot" aimed to be used at buildings.

EDUCATION

Government College of Technology, Coimbatore — B.E. *Electronics and Communication Engineering*-CGPA: 8.69

August 2017 - April 2021

St.Joseph's Mat. Hr. Sec. School, Hosur — *HSC* - Percentage: 96.16% - 2017

St.Joseph's Mat. Hr. Sec. School, Hosur — *SSLC* - Percentage: 95.20% - 2015

HOBBIES/EXTRACURRICULARS

- Chess (Chess.com 1500 - Unofficial)
- Typing Race at typeracer (95 WPM)
- Reading Fiction and non-fiction books
- Guitar, Violin (Basic level)
- Juggling 3 balls
- Amateur astronomy

SKILLS

- **Languages:** Python, Java, Scala, PostgreSQL, Bash, Assembly, Matlab
- **Web:** Django, React, Docker, AWS, FastApi, Scala Play Framework
- **Python:** Data Science, Data Visualization, Machine Learning, IoT, GUI, Web-scraping
- **Microprocessors/controllers:** Raspberrypi, Arduino, ESP8266, BeagleBone, 8086, 8051
- **Tools:** LabView, Proteus, Cadence, Photoshop

ACCOMPLISHMENTS

- Second prize in Caterpillar Inc's annual **Robotic Competition**
- Third prize in Inter-college project symposium for self-driving car with traffic light classifier
- 27th Rank in Robert Bosch's AI national hackathon
- Ranked 6900 out of 100K participants in the first round of TCS Codevita's coding challenge
- Second prize in 4th Board player in Chess competition conducted across 33 colleges.
- Won 2nd Prize on Topic presentation, **'Artificial Intelligence in Prosthetics'** at Ramakrishna College - inter-college Symposium.
- **Coursera Certifications** - Database Management, Python, IoT(2 courses)

ACADEMIC PROJECTS

Caterpillar Inc. Robotic Competition:

Our team of 12 members landed **2nd prize**. The competition involves scoring points by collecting minerals and dropping them at desired positions against a team. The robot has automated and manual movements. I contributed to the software side of image processing and navigation.

Self Driving Car with Traffic sign classification:

Our team won **3rd prize** in an inter-college competition, which involves a toy car with a mounted camera made to detect traffic signs, and the car takes corresponding actions to the signs - speed up/down, left/right turn, stop sign, red and green lights, no overtaking, no horn, stop if there are obstacles, blow horn and overtake if possible.

Automatic Floor sanitizer bot:

Worked on an embedded systems industrial product - "Automatic Floor Sanitizer Robot", which is a fully automated robot that can scan the perimeter and performs wet and dry cleaning with automatic navigation and obstacle detection.

Deployment of Deep learning models in Web:

This project aims to abstract the use of deep learning models that are aimed for educational institutions usage, extending an LMS system where students can track their test progress, staff can create questionnaires for students for a section and students belonging to the section can answer. We deployed it in an AWS EC2 instance, with docker containerization.

UNOFFICIAL PROJECTS

- **Student Dashboard:**

  Live Website: https://student-dash.herokuapp.com/
  Github: https://github.com/TeslaLord/Student-Dashboard-with-django

- **News Portal:**

  Github: https://github.com/TeslaLord/News-Portal-with-Django

- **Group chat:**

  Github: https://github.com/TeslaLord/Group-chat-web-application-with-django

- **Productivity Tracker:**

  Github: https://github.com/TeslaLord/productivity-tracker

- **Interactive Algorithms:**

  Github: https://github.com/TeslaLord/Interactive-Algorithms

  Live Website: https://teslalord.github.io/Interactive-Algorithms/

- **Transaction Application with Tkinter and SQLite:**

  A Tkinter GUI project resembles google pay features like authentication, OTP for login, usage graph, updating profile picture/details, searching friends, sending sample money between accounts and friends. Video Demonstration: http://tharun.tech/images/comppost.mp4