

Tharun Nagaveera Marthandan

Portfolio: <http://tharun.tech/>

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EXPERIENCE

Junior Research Engineer | Buddi AI

June 2021 - July 2022

Worked on automation of medical data processing, creation of data lake and storage system using scala, python, apache-spark, PostgreSQL and Elastic Search.

Python Developer Intern | Pianalytix

December 2020 - January 2020

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

Freelancing

Created a web scrapper GUI with several layers of customization that scrapes eBay orders and produces them in a spreadsheet. Created an invoice generator GUI to insert data with predefined templates and options.

EDUCATION

University of Ottawa, Ontario — M.E. Electrical and Computer engineering

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

HOBBIES/EXTRACURRICULARS

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

SKILLS

- ❑ **Languages:** Scala, Python, Java, PostgreSQL, Bash, Assembly, Matlab
- ❑ **Web:** Django, React, Docker, AWS, Postman, FastApi, Scala Play, Elastic Search
- ❑ **Python:** Data Science, Data Visualization, Machine Learning, IoT, GUI, Web-scraping
- ❑ **Microprocessors/controllers:** Raspberrypi, Arduino, ESP8266, BeagleBone, 8086, 8051
- ❑ **Others:** Photoshop, Premiere Pro

ACCOMPLISHMENTS

- ❑ Created attendance management script during online classes, which reduced around 15 minutes of attendance time per class
- ❑ Third prize in Inter-college project symposium for self-driving car with traffic sign 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
- ❑ Won 2nd Prize on Topic presentation, 'Artificial Intelligence in Prosthetics' at Ramakrishna College - inter-college Symposium.
- ❑ **Coursera Certifications** - Database Management, Python, IoT(2 courses)
- ❑ Second prize in 4th Board player in Chess competition conducted across 33 colleges
- ❑ Second prize in Caterpillar Inc's annual **Robotic Competition**

UNOFFICIAL PROJECTS

❑ Student Dashboard:

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://teslалord.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>

ACADEMIC PROJECTS

Learning Management System:

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

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 automatic 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 inter-college competition, which involved 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 industrial embedded systems product - "Automatic Floor Sanitizer Robot", a fully automated robot that can scan the perimeter and perform wet and dry cleaning with automatic navigation and obstacle detection.