

# MOHAN PS

manu38447@gmail.com | +919535827242 | #76,17th cross,T.G.Layout,bengaluru-560085

[GitHub](#) | [Linkedin](#) | [Portfolio](#)

## EDUCATION

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<b>GITAM university</b> ECEAIML BTECH CGPA: 8.44	Bengaluru 2021 - 2025
<b>Sri Chaitanya techno school</b> PCMIP INTERMEDIATE Percentage: 81.2%	Bengaluru 2019 - 2021
<b>Sri Chaitanya techno school</b> CBSE SSC Percentage: 78.4%	Bengaluru 2018 - 2019

## EXPERIENCE

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<b>KPIT   Intern</b> Issue: Autonomous Reservation and Direction System for Parking Tools: MQTT software, IR sensors, LED lights, node mcu Summary: In short, this project makes parking easier for drivers and maximizes the use of parking spaces in cities by utilizing data analytics and Internet of Things strategies. Through the app, drivers may reserve parking spots ahead of time without having to pay anything upfront. The server is updated accordingly.	Bengaluru   May.13, 2024 - Jun.28, 2024
<b>Function Up   Marketing Intern</b> Summary: Had beneficial experience as a marketing intern and campus ambassador. Gave useful information on time management and workload	Bengaluru   April 1, 2022 - May 31, 2022

## SKILLS

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Programming Languages: python, VLSI, C -Programming  
Tools / Platforms: Xilinx VIVADO, Node MCU, FPGA, MATLAB

## PROJECTS / OPEN-SOURCE

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<b>LEARNING BY RESEARCH</b> Summary: We were able to build an alcohol sensor for a car. An alcohol sensor, MQ3, Arduino interface cable, and GSM SIM 800L were used to achieve this. This alcohol sensor will determine if a person has consumed alcohol or not and, to a certain extent. In the event of intoxication, we will turn off the ignition of the vehicle and send a message to the nearest police station and family member.	<i>MQ3, Arduino interface cable, and GSM SIM 800L</i>
<b>EXCESS 3 TO BCD CONVERSION   Link</b> Self-Complementary property means that the 1s complement of an excess-3 number is the excess-3 code of the 9s complement of the corresponding decimal number. This property is useful since a decimal number can be nines complemented (for subtraction) as easily as a binary number can be ones complemented just by inverting all bits. BCD was commonly used for displaying alpha-numeric in the past but in modern-day BCD is still used with real-time clocks or RTC chips to keep track of wall-clock time and it's becoming more common for embedded microprocessors to include an RTC.	<i>Xilinx VIVADO , FPGA</i>
<b>2D- Grid Occupancy map   Link</b>	<i>ROS2 , Ubuntu 20.4, Gazedo</i>

This project aims to enhance the navigation capabilities of autonomous mobile robots (AMRs) in indoor environments by creating a detailed 2D occupancy grid map using overhead cameras. Similar to the maps generated by AMRs using ROS2-based SLAM algorithms, this map will provide a clear representation of the surroundings, identifying static obstacles such as chairs, tables, and boxes, while dynamically updating to reflect changes like the movement of furniture.

The primary challenge is to maintain the accuracy of the map despite variations in lighting, perspective distortions, and the dynamic nature of indoor spaces. Addressing this challenge will improve AMRs' ability to autonomously plan paths, avoid collisions, and navigate efficiently in environments with unpredictable conditions. This capability is essential for applications such as warehouse logistics, automated cleaning, and healthcare assistance, where AMRs must operate safely and effectively alongside humans.

#### CERTIFICATIONS

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- **MATHWORK - IEEE by GITAM**
- **Personal Finance Mastery - The 1%club**
- **Wealth-Quest - GITAM School of Business's fin Lord's club**

#### HONORS & AWARDS

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- As president of oco (other carrier option), I oversaw a number of initiatives, including an education expo in collaboration with many USA and UK universities and a top advisory group for our college.
- won the gold medal in the wealth-quest hunt competition run by the GITAM School of Business's finance club.
- I was a big contributor to the organization of the Lakasya event and other college placement initiatives as a student coordinator.