Mugundhan M

Embedded Systems

To equip new skills, knowledge and develop professionally and meeting organization requirements and that helps my career which help in organization development.

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EDUCATION

M.Tech(Embedded Systems)
Amrita Vishwa Vidyapeetham, Coimbatore

07/2024 – In-progress   *8.23*

B.Tech(Electrical and Electronics Engineering)
Sri Manakula Vinayagar Engineering College,Puducherry

08/2014 - 05/2018   *8.38*

WORK EXPERIENCE

.Net developer
Tata Consultancy Services

09/2018 - 06/2024   ***Chennai***

Job Description
Worked as a .net developer in Health Insurance & TTH domain

- **Account:** United Airlines | May 2021 – June 2024

Design and development of client applications FPS & FameUA. Which deals with plane fueling information and calculate the fuel expenses based on business logic. Application mainly focuses on online payment details and other financial information.

- **Account:** AXA UK | September 2018 – May 2021

Design and development of application MOL, which deals with axa uk region insurance policy holder details and their claim details. Application focus on insurance payment details and other sensitive information.

ACHIEVEMENTS & CERTIFICATES

- Published a paper titled," Design and Analysis of BLDC Motor with soft magnetic composite core", in IEEMA Journal.

- Service & commitment Award

- Won 2 times On the Spot Award.

- Xcelerate Warrior appreciation.

- Continuous Feedback Star appreciation

SKILLS

C | Python | GitHub | pThread | RTOS
Assembly level programming(ARM7TDMI) | ROS
Dot net 6 | Linux(Basics) | LPC2148 | STM32
Raspberry Pico | ESP32 | RDBMS

PERSONAL PROJECTS

- **IOT Based smart fleet management system**
  Working on cloud-based IoT Fleet Management solution collects data using end and edge devices and publishes it to cloud uses RDBMS for storage. Its cloud-based interface provides real-time monitoring and BMS that optimizes EV performance

- **IOT Based smart energy metering for household**
  Created a Complete IOT based application to monitor the power, water, gas. Using edge and end computing devices collecting the data and publishing it to the cloud using various communication protocols and monitoring the values through web and mobile applications.

- **Traffic control system using FreeRTOS**
  Created a basic model of traffic signal system using FreeRTOS and implemented various concepts like semaphore,mutex,Message passing to implement the traffic system.

- **GUI Tracking application for lab components**
  Developed an application for tracking the Lab components, which has been issued to students. It will act as repository tracking application for lab components based on the component ID and student user ID.

- **Semi Automated Robotic Arm**
  Tried to develop simple a robotic arm to pick and place the object, it is a preprogrammed model.

- **Energy Management for Mobile Devices: Enhancing User Experience through Context-aware Optimization**
  Developing a mobile application which can be used for reduction of energy in mobile devices without compromising the user experience of usage on mobile devices through context-aware optimization.

INTERESTS

1. Embedded system programming

2. IOT

3. ARM architecture

LANGUAGES

English
Full Professional Proficiency

Tamil
Full Professional Proficiency