

Siva Amrutha Divi

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OBJECTIVE

Secure a challenging position as an embedded engineer in a dynamic organization where i can utilize my skills and knowledge.I aim to contribute to the organization success while enhancing my technical skills and growing as a professional in the field of embedded systems.

WORK EXPERIENCE

HR CHAMBERS Outsourcing Pvt Ltd **IT Executive**

Feb 2024 - Present
Hyderabad

- Demonstrable knowledge of SAP security services in identity and access management,platform protection, data protection and Managing security operations.
- Experience in SAP S/4 HANA Security using HANA studio configured standard, technical, and restricted users.
- Analyze and understand the risks associated with applications security exposures and provide solutions to eliminate or reduce these exposures.

Emertxe Information Technologies

- Currently undergoing hands-on technical program - Advanced Embedded systems course at Emertxe Information Technologies,Bangalore.

TECHNICAL SKILLS

Programming Languages

- Advanced C Programming
- OOP using C++ basics
- Data Structures and Algorithm design

Embedded Controllers

- Hands-on working with GPIOs,Analog I/Os, Memory usage.
- Interfacing , Character CLCD
- Peripherals usage-Timers, Counters and Interrupts
- Communication Protocols -UART,SPI,I2C,CAN

Embedded platform

- Distributions-Linux(Ubuntu)
- PIC(16F877A)board

Development Environment and Tools

- Dev Environment : Vim,Makefiles,MPLAB
- Compilers : XC8,GCC

EDUCATION

- Btech(ECE), RK College of Engineering, JNTUK, 7.4cgpa, 2020-2023
- Diploma(ECE), SUVR and SR GPW, SBTET, 9.2cgpa, 2017-2020
- Secondary School,Sri Chaitanya high school , 8.8cgpa, 2017

ACADEMIC PROJECTS

FIRE,GAS and SMOKE SENSOR

Technologies Used : ARDUINO UNO

- In this project, the fire and gas sensor are used to detect fire and smoke ,provide HIGH signal upon the detection.
- It is used to detect fire, alert occupants, and manage risk.
- Whenever it detects fire,it immediately alerts the user about the fire through the LED or BUZZER.

UNDERWATER IMAGE ENHANCEMENT USING MLLE

Technologies Used : MATLAB

- Underwater Images typically suffer from color deviations and low visibility due to the wavelength-dependent light absorption and scattering.
- In this project we proposed a method called MLLE which improve the performances of underwater image segmentation,key point detection and saliency detection.

PROJECTS AT EMERTXE

Image Steganography using LSB Encoding and Decoding

Technologies Used :

Embedded C-File operations, Pointers, Bitwise operators,Functions, Makefiles, Command line Arguments

- The objective was to send a secret text file encoded inside an image of bmp file format.Encoded the length of the secret text and encoded the data into the LSB of the image bytes.The decoding process involves decoding the length and then decoding the text bit by bit.The final output is the secret text after decoding.

Inverted Search

Technologies Used :

C language - Functions,File I/O Operations,File pointers,String operations and Structures

Data Structures - Hashing and Linked List

- This project aims to allow fast text searches when the document is added to the database.By using hash algorithm the document is stored into the database.If we want to check the particular word in the database it will give the information how many times and how many files that word is present.The main aim is to find the easy and better way to find the information.

Car Black Box

Technologies Used : Embedded C, String operations,Bit wise operations

- It is a device that records the information before collision.The goal of this project is to implement core functionalities of a car black box in a PIC based micro controller supported by some peripherals.Events will be logged in EEPROM.We can able to see the speed and gears of the car and we can able to change the time.Only who knows the password they can access the information about the car and also we can change the password if someone knows the password.