

Arya KP

Embedded Systems Engineer

Energetic and meticulous individual with 1 year of experience, determined to contribute innovative ideas and explore various technological fields. Recognized as a strong team player and creative thinker, with proven problem-solving abilities and leadership skills.



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WORK EXPERIENCE

Embedded Systems Engineer IQLabs

04/2024 - 11/2024

Bengaluru Urban, Karnataka

Achievements/Tasks

- Developed, tested, and optimized embedded software for a Water Purification System, significantly improving functionality and performance by implementing key enhancements informed by real-time testing, system analysis, and user feedback.
- Client Interaction and Implementation of Requirements.
- Tools: C, C++, ARDUINO IDE, VS CODE, STM 32CUBE IDE, ESP8266

EDUCATION

Embedded Systems Emertxe - Institute For Embedded Systems & IoT

08/2023 - 04/2024

Courses

- C, C++, Linux, Shell Scripting

B. Tech, Electronics and Communications APJ Abdul Kalam Technological University, Kerala

09/2019 - 06/2023

CGPA

- 8.38

Higher Secondary Board of Higher Secondary Examinations, Kerala

05/2016 - 05/2018

Aggregate

- 91%

SSLC Kerala Board of Public Examinations

05/2015 - 03/2016

Aggregate

- 100%

SKILLS

Linux

C/C++

STM32F030F4P6

VS Code

STM32Cube IDE

Object-Oriented Programming

ARDUINO

I2C

UART

NUCLEO F072RB

EMBEDDED SYSTEM

MICRO CONTROLLER

GPIO

Wi-Fi

ESP8266

Interrupt Service Routines (ISRs)

MQTT

Git

Bitbucket

Shell Scripting

ESP32

Good Communication Skill

Positive Attitude

Good Leadership Skill

Strong Problem Solving Skill

PROJECTS

Water Purifier Bot

- Developed, tested, and optimized embedded software for a Water Purification System.
- Technologies: C, C++, ARDUINO IDE, VS CODE, STM 32CUBE IDE, ESP8266

Vision Based Hand-Gesture Recognition for Identification of Indian Sign Language. (01/2023 - 06/2023)

- Analyzed existing methods for Sign Language Recognition using existing CNN such as VGG-16, ResNet50, InceptionV3.
- Developed a new improved and modified ResNet50 CNN for ISL Recognition by Hyperparameter-Tuning.
- Technologies: TensorFlow, Keras, Jupyter and Python

Theft Monitoring System. (06/2021 - 12/2021)

- Provide additional security inside a room by making use of PIR Sensor.
- Theft Monitoring System using Node MCU

VOLUNTEER EXPERIENCE

Active member at NSS

Volunteered various events and attended NSS camp

Program Coordinator at Excess (Electronic Forum)

LANGUAGES

English

Full Professional Proficiency

Malayalam

Full Professional Proficiency

Tamil

Professional Working Proficiency