NGUYỄN DUY HUÂN

Embedded System/ IOT / Automotive Engineer

Contact information

- Mar 29, 2001
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Skills

Language

Vietnamese, English

Programming

C/C++ Programming
Verilog-HDL

Computer

MS office

Operating system skill

Linux

Interests

-Soccer, music, gym,...
-interest in automotive technology

Objective

Taking advantages of Embedded System Development and Object-Oriented Programming skills & understanding to become a Fresher and bring a lot in automotive industry and another.

Education

HCMC University of Technology and Education *Oct 2019-May 2023*

Major: Computer Engineering

GPA: 8.11/10

Work experience

Projects in university *September 2019-Present*

HCMC University of Technology and Education

- Experience about microcontroller 8 bit (8051).
Description: Have basic knowledge about MCU 8051 (GPIO, interrupt, UART). Communicate with another peripheral (led, segment 7 led, matrix led, button, matrix button, etc).

-Experience about microcontroller 32 bit (STM32F1).
Description: Have basic knowledge about MCU STM32. Communicate with another peripheral (led, segment 7 led, matrix led, button, matrix button,etc).
***YouTube**: https://www.youtube.com/watch?v=WwlnWE8xlr0 link*
***GitHub**: https://github.com/Winxkin/STM32_LCD_menulist.git*

-Project: Library manager application (Using QT framework)
Grade: 9.00
Programming: C++
Description:
+Using C++ programming base on style Object-oriented programming (OOP) combine QT framework to build the UI app.
+ Appling tool DB browser for SQLite to build database local.
***+YouTube** : https://www.youtube.com/watch?v=QobJnvS4IBI&list=PL4wGMuTv9qqIfitPr_mp0eeJJlGMDo30z&index=6*
***+GitHub**: https://github.com/Winxkin/libManager*

-Develop Bluetooth low energy (Beacon device) using module

-Enjoy exploring new technologies
-Read books

BLE NRF51822.
Microcontroller: SoC chip NRF51822
Programming: C
Description:
+Finding direction to connect chip SOC nrf51822 with J-link debugger to build the code into the chip (KeliC5 tool).
+Using C programming to build BLE protocol based on SDK (Software Development Kit) of Nordic semiconductor company.
+Controlling the period of time the advertise of BLE device, data sent, name of device,...
***GitHub**: https://github.com/Winxkin/nRF5SDK110089a8197.git*

-Develop the gateway (change from bluetooth to wifi protocol) using ESP32 based on IDE arduino.
Microcontroller: ESP32 module
Programming: C++
Server: Firebase
Description:
+Using Wi-Fi and Bluetooth library of IDE Arduino for Esp and combine them to change the protocol from Bluetooth to Wi-Fi.
+Receiving the data from the BLE beacon device and sent the this to firebase server.
***YouTube** : https://www.youtube.com/watch?v=Auvf9YhzOnM*
***GitHub**: https://github.com/Winxkin/ESP32_scanBLE_wifi*

-Project monitor agricultural based on lora protocol
Microcontroller: STM32F1, ESP32
Programming: C, C++
Server: Firebase
Description:
+The Node lora (STM32) will gather environment index and send the data through the lora.
+The gateway (ESP32) will receive data from the node and relay into server.
***GitHub**: https://github.com/Winxkin/Lora.git*
https://github.com/Winxkin/esp32_lorawan_gateway.git

-Design router five ports for application network on chip
Programming: Verilog
Description: Design router five ports for network on chip. Enhance communication protocol between components in SOC chip.
***GitHub**: https://github.com/Winxkin/Noc_prj*

Internship at Ban Vien Corporation *Jun 2022-August 2022*

Ban Vien Corporation

-Training with Model Base Design Team
-Joining project vending machine
Description: Developing the RFID sensor for vending machine

-Joining QT team (Project vending machine)
Description: Build API UART to connect with STM32 and build API to connect sever HCM of Ban Vien company.

Part-time employee at Ban Vien Corporation *August 2022-Present*

Ban Vien Corporation

-Training with SOC Embedded team.
Description: training about embedded Linux. Build Yocto project for raspberry pi 3.

-Joining ADAS hackathon.
Programming: C++, C
OS: Linux
Description: integrate peripheral components into jetson nano, build kernel, make can service application, etc. Development Can service application and Dbus application in Jetson nano.

-Joining MBD team.
Description: training SystemC language, system level design, etc.

Honors & Awards

2019-2020 : Encourage academic scholarship at HCMC University of Technology and Education.

2020-2021 : Encourage academic scholarship at HCMC University of Technology and Education.