



Huan Nguyen-Duy

BE - Computer Engineering
Engineer in Automotive industry
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EDUCATION

Degree/Certificate	Institute/Board	GPA	Year	Reference No
SPK.BE. Computer Engineering	Ho Chi Minh City University of Technology and Education	3.22	2023	2427FD23

EXPERIENCE

• Ban Vien Corporation

June 2022 - Aug 2022

Intern

Ban Vien Tower, 54-56-58 Street 2, Van Phuc Residences, Thu Duc district, HCM

– Project vending machine

**Programming: C, C++

[1] Supporting application programming interface of RFID module for STM32F1 chip.

[2] Supporting application programming interface of UART which is connected STM32F1 by QT framework.

• Ban Vien Corporation

Aug 2022 - Apr 2023

Part-time Embedded Engineer

Ban Vien Tower, 54-56-58 Street 2, Van Phuc Residences, Thu Duc district, HCM

– Training SOC project

**Programming: C, C++

[1] Builder tools: Makefile, poky package (Yocto project)

[2] learning embedded Linux that include Linux kernel, Yocto project, Linux application.

[3] Building custom image for Raspberry Pi 3 board.

[4] Expanding GPIO application with PCF8574 module by using device driver.

– Advanced Driver Assistance Systems hackathon project

**Programming: C++

[1] Integrating peripheral components into Jetson Nano by using device driver.

[2] Integrating module CAN mcp2510 into Jetson nano by using device driver.

[3] Integrating module Raspberry camera (imx219) into Jetson nano by using device driver.

[4] Responsibility for design role to develop CAN service, this was combine between CAN interface and DBUS service, which were supported by Linux kernel.

• Ban Vien Corporation

May 2023 - Present

Embedded Engineer

Ban Vien Tower, 54-56-58 Street 2, Van Phuc Residences, Thu Duc district, HCM

– Model base design | QEMU development project

***Customer: Renesas Design Vietnam Co., Ltd., Ho Chi Minh City.

**Brief project: QEMU development project aims the emulation for RCAR chip (development by Renesas Design Vietnam), it creates the emulation fastest platform to reduce the cost and time consumption of the development process. QEMU project was developed by C/Cpp programming and several opensource libraries to emulate RCAR chip series, we implemented all modules in SOC chip (RCAR series) base on hardware specifications which were provided by IC design teams. The outputs of QEMU project were RCAR chip platform software series that had operations similar to real RCAR chip series (developed by IC design teams). These outputs can called Virtual-Platform.

**Fundamental knowledges: modeling techniques, C/Cpp programming, Makefile.

[1] Module RS-CANFD : Investigating hardware specification of RS-CANFD module, preparing environment and Integrating the design of this module to virtual platform. After that, planning to create test case to verify all operations.

– Model base design | RCAR development project

***Customer: Renesas Design Vietnam Co., Ltd., Ho Chi Minh City.

**Brief project: RCAR development project aims the simulation for RCAR chip (development by Renesas Design Vietnam), it uses mainly systemC framework to simulate accurate operations of RCAR chip base on hardware specifications which were provided by IC design teams. RCAR project objective provide for customer the virtual platform of SOC chip with high accurate.

**Fundamental knowledges: modeling techniques, systemC framework, C/Cpp programming, Makefile.

[1] VSP2 module (Video Signal Processor) : Investigating hardware specification provided by IC design teams and updating some registers which were changed compare with last specification version.

[2] SHIP-M-AES submodule (Security Advanced Encryption Standard): Investigating hardware specification provided by IC design teams, Responsibility for design dummies, preparing environment to verify AES module. Creating test case to verify full operation of AES submodule.

[3] CRAC-SM4B submodule (Security Advanced Encryption Standard of china): Investigating hardware specification provided by IC design teams, Responsibility for design dummies, preparing environment to verify SM4 submodule. Creating test case to verify full operation of SM4 submodule.

[4] CRAC-KEYRAM submodule (memory module): Investigating hardware specification provided by IC design teams, Planning to design KEYRAM module adapt to new version of hardware specification, which include architecture design, unit design, and coding design.

PERSONAL PROJECTS

- **Spotify Product Analysis** *Dec. 2023 - Jan. 2024*
Road to Intern Fair Drive
 - Project Work Done 1
 - Project Work Done 2
- **React Weather App** *Dec. 2023 - Jan. 2024*
Road to Intern Fair Github
 - Project Work Done 1
 - Project Work Done 2
- **Project Name 3** *Oct. 2023 - Jan. 2024*
Club Name/Professor Name Reports
 - Work Done 1
 - Work Done 2

SKILLS

- **Programming:** Python, C/C++, Java*
- **Category XYZ:** Skill A, Skill B, Skill C
- **Operating Systems:** Windows, Linux*
- **Non Technical:** Product Management, Financial Analysis, Consulting ** Elementary proficiency*

KEY COURSES TAKEN

- **Mathematics:** Linear Algebra, Basic Calculus, Discrete Maths, Probability & Random Processes
- **Product Management:** Product Matters 3.0
- **Course Category XYZ:** Course Name 1, Course Name 2, Course Name 3, Course Name 4

POSITIONS OF RESPONSIBILITY

- **Associate Manager,** XYZ Club, IIT Guwahati *Apr. 2018 - Apr. 2019*
 - Conducted so and so event for this many audience

ACHIEVEMENTS

- **Bronze Medal,** XYZ Challenge, ABC Company, FGH City *2018*
- **JEE Advanced 2021,** Secured **AIR XYZ** among 0.15 million candidates appearing for the test *2021*
- **JEE Mains 2021,** Secured **AIR XYZ** among 2.2 million candidates appearing for the test *2021*

EXTRACURRICULARS

- **XYZ position,** ABC Society
- **Student Volunteer,** ABC Activity