Phu Pham
Software Engineer

17 N3, Mega Residence, Phú Hữu Ward, Thủ Đức City

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Seeking position in software/firmware development or related areas that requires extensive experiences and knowledge in various software/firmware technologies.

WORK EXPERIENCE

Software Engineer

DreamBig Semiconductor, 2022 - Now
Developed C-model/software for Network Interface Card (SmartNIC)

1. Developed C-Model for SmartNIC. The C-Model is used in the early phases of the development of a chip. The CModel will be put inside the Linux kernel to provide support for testing device drivers and other kernel modules. It is also used in verifying hardware modules.

2. Developed simulation of the kernel environment in user-space. The purpose of this project is to create a simplified simulation of the Linux kernel, so we can build and run real device drivers directly in user-space mode. The project will be used throughout the development and testing phase of hardware modules (in RTL code).

Software Engineer

Virtium Technology, 2012 - 2019
Developed firmware/software for Solid-State Drive (SSD)

1. Developed SSD firmware. The firmware has many modules: Host-Interface, Host-Manager, Table-Manager, NAND-Manager, NAND-Interface. I am responsible for implementing the Host-Manager module.

2. Improving Read/Write ATA commands' performance (sequential and random read/write modes).

3. Developed Storage Applications: SSD-Healthkit, SMART-Collector, Disk-Eraser, and Firmware Update. These applications run on multiple platforms (Windows, Linux, FreeBSD), in both CLI and GUI modes (using C++/Qt).

4. Developed software for the Virtium IoT Gateway device. This software module supports controlling and monitoring the SSD drive from the cloud (using C/C++/Python/MQTT).

Software Engineer

Harvey Nash Vietnam, 2011 - 2012

1. Developed software for SmallCell device. The deliverables include an NBAP handler to convert data from the NBAP protocol to the FAPI interface, and a PHY Control Plane module to process messages in the control plane.

Software Engineer

Renesas Design Vietnam, 2008 – 2011

1. Developed application to test MPEG-4 Video CODEC middleware on VPU5 IP (coverage and performance tests).

2. Developed Video-Tool that parses and displays the video streams syntaxes (using C++/MFC).

3. Developed Math and Image Processing libraries for Renesas MX SIMD processor.

EDUCATION

Bachelor of Computer Science

Ho Chi Minh City University of Technology - 2003 - 2008

Final thesis: Porting the back-end of GNU C Compiler to C166 microcontroller.

Reference: Dr Nguyen Hua Phung, Faculty of Computer Science and Engineering, Ho Chi Minh City University of Technology.

TECH SKILLS

C, C++, STL, Qt Framework, Windows programming, MFC.
Data Structures, Algorithms, Debugging, Software Design, Embedded Software, Firmware, Desktop Application.