

Fernandez, Nathaniel Formento

Contact [0917-5260312](tel:0917-5260312) / nfernandez7219@gmail.com

Skills/Exposure:

Technical:

- Demonstrate success in all of the projects or assignment being given
- Quickly learn new technologies and adapt to a fast-paced development environment
- Exposed in Firmware Development using C/C++/Assembly (Different CPUs 8b to 32b)
- Exposed in Windows Device Driver Development using WDK
- Exposed in Linux Device Driver using Different Linux Kernel, OpenWRT.
- Exposed in High Level Programming Languages (C++, JAVA, and android kotlin)
- Exposed in Digital Video Broadcasting (DVB-SIS T2-MI) Firmware Development
- Exposed in Azure DevOps
- Exposed in Yocto Development

Tools:

- Exposed in CVS and GIT for repository
- Different IDEs and Compilers

Management:

- Have a Certificate in Team Enhancements and People Handling Training
- Have a Training Certificate in Problem Solving & Decision Making Through Critical Thinking.
- Have a Software Project Management Using Agile Scrum, Waterfall, and other Software Management Methodology.

Work History

03.2023 - Present

Music Tribe Philippines (Makati City)

Firmware Team Lead

- Leading Firmware Team development using STM32 and other 32b CPU, Keil and Eclipse for IDE
- Involved in Technical Development for ETM Hardware Diagnostic Tool using QT

03.2022 - 03.2023

Igen Technologies (Makati City)

Senior Software Engineer

- Handle Payment System Using Android Kotlin

04.2020 - 02.2022

Free Lancer

Flexxon Singapore

- Front End Software using QT (NVME PCIe)
- PCIe Back-End Firmware

Dubai (Application Firmware Back-up System CopyA/CopyB)

- using STM32 32 bit ARM Cortex

Upwork Projects Using:

- OpenWRT, JSON, MQTT

03.2013 - 03.2020

Bitmicro Network International Inc.

Advanced Software Group, [Sr Manager](#) (BIOS, IOC, SW Team)

Managed Firmware/Software for the following Projects:

- ULPA2 - A low cost/industrial grade ethernet NVME Device
- Acument v1/v2 - Scalable Secure Network Storage
- Achievements: All of the Projects have been achieved and have customers.

04.2007 - 02.2013

Bitmicro Network International Inc.

Advanced Software Group, [Manager](#) (BIOS, IOC, SW Team)

Managed Firmware/Software for the following Projects:

- Managed PCIe 2.0 from Firmware, Software, Device Driver
- Managed SATA/FC Across Engineering Cross Functional
- Architect Caching SW for Agnostic/Non-Agnostic SSD.
- Developed Linux Device Driver for PCIe SSD
- Developed Windows Device Driver for PCIe SSD for XP, 2003, Win7, and 2008 using WDK ver 7.
- Developed EDMx Using JAVA
- Developed VmWare Device Driver for Virtualized PCIe
- Involved in Firmware Development for SAS/SATA II (Bios) using PPC405Ex, and other 32 Bit Processors.
- Involved in Firmware Development for EDisk Products.
- Achievement: All the projects have been achieved as agreed.

09.2004 - 04.2007

Bitmicro Network International Inc.

Advanced Software Group (Bios Team):

[Sr Project Lead, Head Project Lead, Sr Technical Lead](#)

Involvement:

- Team Lead for BIOS Team
- Software Development using JAVA - EDisk Tester
- Created RTOS mqx-based code for multi-processor system using ARC700.
- Created Several bios-based code for PATA, SATA, FC, and U320 Products.
- Lead the Controller-Board-Tester Project (EDisk Products)
- Support Sanitize SSD Feature for EDisk Products like PATA, FC, and U320.
- Achievement: All the projects have been achieved as agreed.

11.2002 - 08.2004

Hugle Technologies Inc.

[Project Lead/Design Engineer](#)

Involvement:

- Design & Developed Bluetooth Hub and Dongle using SECS II Protocol with ARM9 and Nucleus RTOS
- Designed & Developed Bluetooth Hub for Ionizer System.
- Designed & Developed Abstraction layer for bluetooth protocol.
- Designed & Developed bluetooth hub with can controller interface.
- Designed & Developed contact and contactless smartcard system using Atmega8.
- Achievement: All the projects have been achieved as agreed.

11.2002 - 08.2004

Danam Philippines Inc.

[Production Manager](#)

Involvement:

- Handled Production Operation
- Achievement: Daily target output have been achieved as agreed

[Design Engineer](#) (Located in South Korea)

- Designed & Developed Control Board for RF Team
- Responsible for IMT2000 PCS Control Board using 87c550 and Visual C++ 6.0

- Responsible for Monitor Board for Satellite Control Board using 80c320 and Actel (HDL Coding, Atmel PLD220v10m), UART 232/485 Firmware
- IR System using Visual C++ 6.0 for RS232 and 80c320
- Achievement: all the project have been achieved as agreed

08.1998 - 03.2000

Mitech BTHI

Design Engineer

Involvement:

- Designed & Developed Industrial and Commercial System for Automation
- Responsible for Manila Peninsula and SM Keppel Unmanned Car Parking System.
- Responsible for Mandarin Oriental Hotel Car Parking system and customization of Ayala, Mega Mall, Robinson, and other Car Parking here in Metro Manila.
- Exposed in time Keeping System using z80 and 68hc05.
- Provide Solution to replace obsolete chips for existing products.
- Provides Technical support to the engineer in the field.
- Achievement: all the projects have been achieved as agreed.

Service Engineer

- Provide Solution to Mitech Computerized Car Parking
- On-Site Hardware, Firmware, and Software Trouble Shooting.
- Provide Firmware program to make the product more convenient
- Assigned to make quotation/estimation to existing customer
- Achievement: daily assignments have been achieved as agreed.

Education

03.1991 - 03.1998

AMA Computer College Quezon City, Philippines
B.S In Computer Engineering