

VERNALIZA R. ULTIMO



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PROFILE

A registered Electronics Engineer who chose the path to become a Software Engineer. Has more than nine years of experience in software development in both Windows and Linux platform. Has been involved in software design, documentation, implementation, integration, testing and deployment.

Excellent programming skills using C/C++ and QT. Knowledgeable in Linux Shell Scripting and Python. Experienced in developing multi-platform, multi-threaded, both GUI and non-GUI applications. Strong experience in using STL and data structures as well as memory management. Most of the applications developed involved interactions with solid state devices – firmware, driver and hardware. Has the ability to isolate firmware and software bugs in fixing hard to debug problems. Excellent problem solving and troubleshooting skills. Well-experienced in software development, testing, debugging and system integration in an Agile environment.

Willing to learn, detail-oriented, and can master new skills quickly. Committed and result-oriented. Attention to details and accuracy. Openness to creativity, innovation, and change. Excellent teamwork and strong communication skills. Desire to learn new skills, be challenged, and have growth potential. Ability to work in a fast paced environment.

WORK EXPERIENCE

April 2020 - Present: Senior C++ Developer at Cambria Software Philippines

Project: Client-Server software

- Involves in developing and testing client-server software
- Performs test automation using Appium and Python
- Creates Android Java application with native C++ code
- Language and Tools: C++, Python, Visual Studio Code, Android Studio, AWS, TestLink

2019-2020: Software Engineer at BiTMICRO Networks International, Inc.

Project: ACUMEN (Daemon Application running in Embedded Linux OS)

- Design and development of Linux Daemon in Ubuntu
- Algorithms in sending commands to device driver
- Implemented REST APIs to receive commands from web server
- Involved in the implementation of Crypto Erase and Zeroization features
- Implemented Folder Management feature using SAMBA
- Implemented Software Update feature
- Testing, debugging and maintenance of software and all its features
- Language and Tools used: C/C++, QT

2018-2019: Software Engineer at BiTMICRO Networks International, Inc.

Project: RAMPART (Linux Daemon)

- Design and development of Linux Daemon in Ubuntu
- Algorithms in sending NVMe commands to SSD firmware
- Implemented REST APIs to receive commands from web server
- Implemented Firmware Update and Firmware Commit features
- Implemented NVMe Format command
- Testing, debugging and maintenance of software and all its features
- Created DEB packages for daemon software deployment
- Language and Tools used: C/C++, QT, Shell Scripting

2017-2018: Associate Software Engineer at BiTMICRO Networks International, Inc.

Project: BiTApps Daemon (Linux Daemon)

- Design and development of Linux Daemon in RHEL and CentOS
- Algorithms in sending SCSI / PCIe commands to SSD firmware
- Implemented Download Microcode / Update Firmware feature
- Testing, debugging and maintenance of software and all its features
- Created RPMs for daemon software deployment

- Language and Tools used: C/C++, QT, Shell Scripting

2016-2017: Associate Software Engineer at BiTMICRO Networks International, Inc.

Project: NVXL (GUI-based Standalone Software)

- Design and development of GUI-based software in Ubuntu
- Algorithms in sending ATA and NVMe commands to SSD firmware
- Implemented the CDBs (Command Descriptor Block) and IOCTL to support both ATA and NVMe protocols
- Implemented ATA Inquiry and Security Erase Unit features
- Implemented NVMe Identify, Firmware Update and Firmware Commit features
- Testing, debugging and maintenance of software and all its features
- Created software installers using QT Installer Framework
- Language and Tools used: C/C++, QT, QT Installer Framework, Shell Scripting

2015-2016: Associate Software Engineer at BiTMICRO Networks International, Inc.

Project: BiTApps CLI (Command Line Interface)

- Design and development of CLI-based application in Linux (Fedora, RHEL, CentOS)
- Algorithms in sending SCSI / PCIe commands to SSD firmware
- Implemented Secure Erase feature
- Testing, debugging and maintenance of software and all its features
- Created RPMs for CLI software deployment
- Language and Tools used: C/C++, QT

2012-2015: Cadet Software Engineer at BiTMICRO Networks International, Inc.

Project: BiTApps Management Software (GUI-based Standalone Software)

- Involved in the development of software documentation such as Software Requirement Specification and Detailed Design Specification
- Design and development of GUI-based software in Windows (7, 8, 10, Server) and Linux (Fedora, RHEL, CentOS)
- Implemented the connection of software to database (MS SQL) and other database related queries
- Algorithms in sending SCSI / PCIe commands to SSD firmware
- Implemented System Configuration feature
- Implemented Read Defects feature
- Testing, debugging and maintenance of software
- Created software installers using Inno Setup for Windows and QT Installer Framework for Linux
- Language and Tools used: C/C++, MS SQL, QT, Inno Setup, QT Installer Framework

TECHNICAL STRENGTHS

Languages:	C/C++, Linux Shell Scripting, Python, MS SQL
Technologies:	SCSI Protocol, NVMe Protocol, ATA Protocol, QT Libraries, REST API, Samba, Appium, TCP/IP, UDP
Tools:	QT, Inno Setup, QT Installer Framework, Visual Studio Code, Android Studio, Bugzilla, Asana, AWS EC2, TestLink
Version Control:	CVS, Git

FORMAL EDUCATION

2011:	Registered Electronics Engineer (ECE # 0049390)
2006-2011:	Bachelor of Science in Electronics and Communications Engineering Bataan Peninsula State University Balanga City, Bataan, Philippines