

AREA OF SPECIALIZATION/INTERESTS

Bluetooth, GSM, IoT, LAN and WLAN, LoRaWAN, Mesh networking, RF, Battery charging systems, Printed circuit board design, mechanical design, Body coupled communications, Control and measurement, Power supply design, Sensor development and embedded systems

WORK EXPERIENCES

PRODUCT DEVELOPER/EMBEDDED SYSTEMS ENGINEER

July 2017 - Present

NRS Enlight FZE/NRS INTERNATIONAL FZE, Dubai, United Arab Emirates

- Developed embedded applications for battery operated equipment - Load analysis, instrumentation systems
- Designed multilayer PCBs for various products
- Developed payment processes for services (Pay-as-you-go)
- Set-up and programming of pick-and-place PCB assembly machines
- Designed high voltage, large scale solar systems
- Designed casings for various products, and integration with electronic and mechanical components - Including designing shock-proof casings, meeting IP ratings for water and dust-proofing

ELECTRONIC DESIGN/EMBEDDED SYSTEMS ENGINEER

April 2016 – November 2017

Eva Technologies Inc., Dubai, United Arab Emirates

- Design of electronic circuits, printed circuit boards and firmware development
- Implementation of IOT (Internet-of-Things) based systems
- Integration of hardware and software components

ELECTRONIC HARDWARE SYSTEMS ENGINEER

October 2009 – Present

Independent private practice, United Arab Emirates/Philippines

- Design sensors, control circuits, wireless systems, signaling and control circuitry based on required specifications of client along with PCB design
- Provide consultation, research and experimentation based on electronic systems

SERVICE and SYSTEMS ENGINEER

July 2015 – July 2017

Integrated Technologies L.L.C, Dubai, United Arab Emirates

- Design and integrate low voltage systems with current systems on site, by providing solutions with regards to client requests in upgrading, integrating or replacement of existing systems
- Deal with installation, maintenance and repairs of gate barriers, configuration of access controls, SMATV, computer networks and structured cabling
- Perform IT related works such as backups, network upgrades and computer repairs

REMOTE OPERATIONS ENGINEER (TRAINEE/INTERN)

March 2013 – June 2013

ABS-CBN Broadcasting Corporation, Baguio City, Philippines

- Set up, operate and maintain microwave LOS (Line of Sight) using microwave transmitters and receivers
- Set up, operate and maintain studio lighting, video equipment, cameras, video mixing board, digital video recorders (DVRs), audio equipment

SOUND ENGINEER (University scholarship)

February 2012 – September 2014

University of Baguio, Baguio City, Philippines

- Set up, operated and maintained audio equipment during recording sessions and concerts
- Troubleshoot and repair faulty electronic equipment and instruments

EDUCATIONAL BACKGROUND

BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BSEcE)

University of Baguio, Baguio City, Philippines

CCNA (Modules 1-4)

SOFTWARE

PCB design: Altium, Diptrace, EagleCAD, KiCAD
2D and 3D design: AutoCAD, DesignSpark Mechanical, Fusion360, LibreCAD, FreeCAD
Simulations: LTSPICE, MATLAB, Multisim, Proteus, SCILAB
Programming: ATMEL Studio, Arduino IDE, C++, Processing, Python, STM32CubeIDE