Emmanuel Panaligan

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EDUCATION

University at Buffalo, The State University of New York
Bachelor of Science in Computer Engineering, May 2015

EXPERIENCE

Software Engineer at Telephonics Corporation, June 2015 – February 2018

- NAVAIR VXX VH-92A Presidential Helicopter Communication System
  - Utilized the IDEs Eclipse and Visual Studio to generate and debug C++ code that complies with the DO-178B Level B Software Guideline as defined by the Federal Aviation Administration
  - Pushed and pulled code from the Subversion repository, determined code coverage by conducting unit tests with VectorCast and composed code comparison reports using BeyondCompare
  - Participated in code and design peer reviews, prepared weekly status reports and updated documents in IBM DOORS
- Saab Gripen Fighter Jet Audio Management Unit(A.M.U.)
  - Ported base code from an existing product line and patched in additional functionality as specified by the customer
  - Constructed a Software-Driven Radio Simulator in Visual Basic in order to simulate RS-485 serial communications between the Rohde & Shwarz SDAR Radio and A.M.U. onboard the Saab Gripen Fighter Jet
  - Performed tests specified in the Software Test Document(SWTD) as well as the System Design Verification Tests (SDVT) in order to obtain code coverage using the CodeTest tool
- RDR-1700A Weather RADAR
  - Modified the Software Design Description(SDD) in Enterprise Architect based on the Software Requirements Specification(SRS)
  - Restructured existing C++ base code and build using Wind River Workbench in order to bring it up to DO-178B Level C standards

PROJECTS

Android Wear Development: Life Monitor App, January 2015 – May 2015

- Developed an Android Wear application that monitors the vital signs of firefighters using the onboard sensors on a smartwatch which sends warning text messages when it detects abnormalities

Engineering Intramural: Camera App Development, September 2014 – March 2015

- Collaborated with a professional photographer and a team of students to develop an Android application involving DSLRs
- Competed against other teams in order to produce an app that best meets the requirements set by the project sponsor

Drone Traffic Control System, November 2014

- Authored a program that prevented drone collisions on a fixed grid using multi-threading, mutexes and semaphores in C

Wind Turbine Construction, August 2011 – December 2011

- Modeled, built, and tested several turbine blade configurations in order to achieve optimal power output
- Presented a complete design proposal with a prototype to a panel of engineers for evaluation

SKILLS

Computer Skills

- Programming Languages: Java, C, C++, HTML, JavaScript, CSS, Linux Terminal, SQL, Q, Assembly, XML, Python, VB.NET, C#
- Computer Software: JQuery, Bootstrap, Node.js, Express, GitHub, VectorCast, Eclipse, Visual Studio, TortoiseSVN, BeyondCompare, Android Studio, Fiddler, Wind River Workbench, Multisim, Maple, Oracle, Linux, Enterprise Architect, CodeTest

Languages

- Fluent in English and Tagalog, proficient in fundamental French

ACTIVITIES

IEEE, May 2016 – February 2018

- Attended networking events and seminars in order to remain up-to-date on contemporary technology

BrickHack at RIT, April 2015

- Produced an Android application that included VoIP functionality by implementing the Twilio API

UB Design Club, September 2014 – May 2015

- Explored product design and development with a multi-disciplinary group of students with a focus on entrepreneurship