Margret A. Q. Tumbokon

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Education

Bachelor of Science, Electrical & Computer Engineering - May 2017 (Expected)

The University of Texas at Austin - GPA: 3.92 / 4.00

Related Courses: Embedded and Real-time Systems Lab (Real-time Operating Systems), Digital Signal Processing Lab, Algorithms, Probability, Software Engineering Lab, Signals and Systems, Introduction to Automatic Controls

Work Experience

Software Engineering Intern - Raytheon Space and Airborne Systems

May – August 2016

- Worked in an Agile development team on software change requests, manual testing, and code reviews
- Configured nightly builds and static analysis tools by creating scripts and writing support documentation
- Analyzed results of static analysis tools to find actual defects in code and recommend solutions
- Wrote unit tests for subsystems

Software Engineering Intern - Freescale Semiconductor Inc.

June - August 2015

- Improved a manufacturing tool by making it cross-platform and integrating it into an Eclipse plug-in, working with a
 partner in C++, JNI, and Java
- Deployed the manufacturing tool for field testing by packaging it with user documentation

Teaching Assistant - University of Texas at Austin

August 2015 – May 2016

- Assisted Software Design I & II by facilitating lab exercises, answering student questions, and grading exams
- Wrote unit tests to grade submitted programming assignments

Orientation Advisor - University of Texas at Austin

June – August 2014

- Facilitated groups of new students through the orientation process
- Provided advising and support to new students

Academic Experience

Racing Robot - Project for Embedded and Real-time Systems Lab

May 2016

- Built a small autonomous four-wheel robot with a team of four for a class racing competition
- Developed a real-time operating system on a microcontroller for the robot in C and ARM assembly
- Wrote code for wall avoidance, sonar sensor driver, and message interface for sensor and motor controllers

Messaging Web Application - Project for Software Engineering Lab

February – May 2016

- Developed a web application for messaging for term project with team of four
- Deployed application on Google App Engine and coded back-end using Java
- Created unit tests and regression tests to verify correctness

Wind Power Plant Modeling - GLUE Research Program

January – May 2015

- Modeled wind power plants to compare to actual wind power plants under the guidance of a graduate student
- Modeled rotor, engine, and generator of Type I wind turbines in MATLAB and Simulink
- Presented at UT Student Engineering Council Poster Competition

Lab Volunteer - UTeach Engineering

March - April 2014

Developed and tested robotics lessons for high school STEM programs

Volunteer Experience

Outreach Coordinator - UT Women in Electrical & Computer Engineering

August 2014 – May 2015

- Organized club outreach events with co-coordinator
- Facilitated STEM outreach activities for elementary through high school

Skills

- Experience with C, C++, Java, Jenkins
- Familiar with MATLAB, Eclipse Plug-In Development, Linux, Git, Windows Batch Scripting, ARM Assembly Language
- Some Familiarity with Subversion Tools, Julia, Python, Ada, Agile Methodology