R A P H A E L L E   M A R C I A L

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EDUCATION   **Rutgers University, New Brunswick, New Jersey**   May 2018
B.S. in Computer Engineering

RELEVANT COURSES

- Hardware/Software Design of Embedded Systems - 14:332:493   Fall 2017
- Programming Methodology II - 14:332:351   Fall 2016
- Linear Systems and Signals - 14:332:345   Fall 2016

TECHNICAL SKILLS

- Languages: C/C++, Assembly, VHDL (basic), MATLAB, HTML, CSS, PHP, MySQL
- Tools: Git, PSPICE
- Equipment: Arduino, Raspberry Pi, Oscilloscope, Signal/RF Generators, Multimeter
- Operating Systems: Windows, Linux elementary OS/Ubuntu, macOS

RELATED PROJECT   **Restaurant Automation for Software Engineering - 14:332:452**   Spring 2017

- A 7-member project that involves developing a demonstrable web application to produce more efficient operations in medium-sized restaurants
    - Planned and executed lifecycle steps for developing the complex software product
    - Utilized traditional and web programming languages such as Java, SQL, and PHP
    - Learned modular design of software and documented the design using symbolic representations via UML

RESEARCH   **Rutgers Solar-to-Vehicle (S2V) Project**   May 2016 - Present
Aresty Research Assistant

- Implemented a surveillance system using Python scripts in Raspberry Pis connected to solar modules, solar panel charge controllers, and rechargeable batteries to evaluate power consumption in electric vehicle charging stations
- Developing a website for electric vehicle users to view when their cars are finished charging, and whether a charging spot is occupied by another user
- Creating a business model for Rutgers University - New Brunswick in order to provide additional charging stations for a campus with more than 50% of the population being commuters

LEADERSHIP   **Rutgers Electronics Club**   January 2017 – Present
Co-Founder

- Created a club that allows beginners in electronics to get hands on experience in Arduino and Raspberry Pi
- Assisting students learn through weekly interactive projects
    - Walking through hardware setup and coding implementation
    - Checking groups' progress and troubleshooting when necessary
- Writing documentation involving attendee feedback that will be presented to the Engineering Governing Council to make the club official

    Engineers Without Borders – Guatemala   January 2015 – September 2016
Monitoring Lead

- Led members in analyzing about 100 survey results involving living costs and satisfaction levels from the Guatemalan civilians using multi bar charts in MS Excel
- Designed a new survey to be utilized in the next post-monitoring trip to evaluate the organization's progress in Guatemala
- Created and presented posters university competitions throughout the northeast

WORK EXPERIENCE   **Golf Galaxy, Paramus, New Jersey**   June 2015 - September 2016
Sales Associate

- Generated about $25000 daily during golf season while collaborating with the store merchandiser to update store displays
- Assisted 200 customers daily with purchasing apparel, clubs, laser rangefinders, and GPS watches

ACTIVITIES   **Society of Women Engineers (SWE)**   September 2014 - September 2015
Mentee

- Collaborated with members in deciding weekly meeting topics
- Partnered with a mentor who eased the challenging transition from high school to college

    Stevens Institute of Technology, Hoboken, New Jersey   July 2013 - August 2013
Student

- Experimented with electroencephalograms to determine how they could be used in medicine as part of the Steven Summer Pre-Med Engineering Program
- Presented research with 3 other students about the group's experience with the Emotiv Student Development Kit to peers and supervisors