Matthew R. Mendez

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LinkedIn

Education

Florida International University (FIU) | *Bachelors of Electrical Engineering*   **Miami, FL | December 2017**
- ◉ **GPA: 3.86/4.00**
- ◉ Dean's List: Fall 2013, Spring 2014, Summer 2014, Fall 2014, Spring 2015, and Fall 2015

Skills

- ◉ MATLAB, Arduino, Xcode
- ◉ Java, C, C++, C#
- ◉ Bilingual: English, Spanish
- ◉ RTL-SDR, USRP, GR-GSM, SDR#
- ◉ Multisim, LTspice, Altium Designer
- ◉ AutoCAD, LabView, Xilinx ISE
- ◉ Linux, Mac OS, Windows, Cyber Security
- ◉ Kali Linux, Metasploit, Wireshark, Nmap
- ◉ Ettercap, Cain & Abel, John, Arpspoof

Work Experience and Research

FIU Integrated Nanosystems Lab | *Undergraduate Researcher*   **Miami, FL | August 2015 – Present**
- ◉ Conducting research on Visible Light Communication funded by the National Science Foundation
- ◉ Project Leader on an experiment to determine the viability of visible light communication and its effects on RF

Lutron Electronics | *Electrical Engineering Intern*   **Boynton Beach, FL | June 2015 – August 2015**
- ◉ Designed and formulated a power/energy measurement feature that will be implemented into future lighting control devices and inform users of their energy consumption
- ◉ Investigated methodologies for SPICE simulation utility in Altium Designer and composed a 15-page tutorial to assist engineers with future circuit designs

Projects

Radio Frequency Ambient Power Harvester | *Project Member*   **October 2015 – Present**
- ◉ Designing and constructing a power-scavenging device that will harvest and convert ambient radio-frequency emissions into useable DC power
- ◉ Implementing an efficient wideband RF-DC converter to maximize the power harvested by the antennas

Android Phone Hack with Metasploit | *Project Leader*   **October 2015**
- ◉ Demonstrated how to hack into any Android phone, and created a video: https://youtu.be/luY_xN_rybM

Power Measurement & Energy Reporting | *Lutron Electronics Intern*   **June 2015 – August 2015**
- ◉ Performed experiments on hardware prototypes using electrical testing equipment to measure and analyze voltage/current signals
- ◉ Created a C# program to send a continuous dimming sequence to a light load via radio for experimentation
- ◉ Utilized MATLAB scripts and DSP to determine the sampling rate for calculating power within a 2% error margin

Interactive Display Monitors for the Engineering Campus | *Project Manager*   **June 2014 – Present**
- ◉ Launching a new project with faculty and administration to set up 7 digital signage monitors throughout the engineering campus to make it more accessible and welcoming to students and visitors

Leadership & Extracurricular Activities

Institute of Electrical & Electronics Engineers (IEEE) FIU Branch | *Vice President*   **April 2015 – Present**
- ◉ Manage student branch affairs, coordinate projects, and organize events for our 100+ members
- ◉ Organized the sales of electrical circuits kits to FIU engineering students, generating over $8,000 of revenue

FIU Elevated Importance on Students (EIS) Team | *Co-founder/Vice President*   **June 2014 – Present**
- ◉ Creating a monthly program to assist retired and elderly faculty with using and understanding technology
- ◉ Generate innovative and practical ideas to improve FIU's engineering campus

Eta Kappa Nu Engineering Honor Society: Kappa Delta Chapter | *Member*   **February 2015 – Present**
- ◉ Active member involved in engineering projects and community service events

FIU Engineers on Wheels Community Outreach Program | *Coordinator/Volunteer*   **February 2015 – Present**
- ◉ Directed and Taught interactive STEM lessons to over 2,000 K-12 students in Spring 2015