

Beatriz Jimenez

b.jimenez@ufl.edu | 4700 SW Archer Rd Gainesville, FL 32608 | 305.562.5165

Education	Ph.D. in Electrical Engineering Spring 2019 – Present <i>University of Florida (UF), Gainesville, FL</i> Advisor: Dr. David Arnold GPA: 3.83/4.0
	Bachelor of Science in Electrical Engineering Fall 2014 – Fall 2018 <i>University of Central Florida (UCF), Orlando, FL</i> GPA: 3.7/4.0

Research Experience	Graduate Research Assistant Spring 2019 – Present <i>University of Florida, Gainesville, FL</i> <ul style="list-style-type: none">Working on creating and manipulating electropermanent magnets and building a small pulse magnetizer circuitDesigned and built a magnetic coil to observe the effect of magnetic fields on the norovirus
	EXCEL Program: Undergraduate Researcher Spring 2016 – Fall 2018 <i>University of Central Florida, Orlando, FL</i> <ul style="list-style-type: none">Performed research on the detection of pesticide residue on produce, specifically diphenylamine on apples using Fourier Transform Infrared SpectroscopyContinued work on the detection of dengue protein from summer projectSupervised undergraduate students and high school students working in the lab
	NSF REU Program: Undergraduate Researcher Summer 2018 <i>University of Central Florida, Orlando, FL</i> <ul style="list-style-type: none">Performed research on the detection of dengue protein in PBS buffer utilizing Fourier Transform Infrared Spectroscopy, functionalized biosensors, and microfluidic channelsFabricated localized surface plasmon resonance biosensors using e-beam evaporation, ALD, and photolithography
	SURF Program: Undergraduate Researcher Summer 2017 <i>University of Florida, Gainesville, FL</i> <ul style="list-style-type: none">Performed research on the use of magnetic neural stimulation and designed and simulated the magnetic and electric fields of prototype neural probes on COMSOLPerformed research and experimentation on the detection of bacteria in water using magnetic micro-discs

Research Presentations	Summer Research Showcase Summer 2018 <i>University of Central Florida, Orlando, FL</i> Presented research poster on “On Chip Label-free Detection of Pathogens in Biological Fluids using an Aptamer-functionalized Plasmonic Sensor”
	UCF Showcase of Undergraduate Research Excellence Spring 2017 <i>University of Central Florida, Orlando, FL</i> Presented research poster on “Infrared Spectroscopy Techniques for Pesticide Detection”

**Group
Projects**

Senior Design Project: Parking Garage Monitoring System

Fall 2018

University of Florida, Gainesville, FL

- Performed research on a variety of sensors and prototyped and designed a PCB board on Eagle CAD to power and program an ultrasonic sensor to detect the presence of a vehicle in a parking space
 - Experienced in Eagle CAD, soldering iron, multimeter, oscilloscope, function generator
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**Leadership/
Activities**

Member, IMG Social Media Committee

Spring 2019 – Present

Member, Institute of Electrical and Electronics Engineers

Fall 2016 – Present

Member, Golden Key International Honour Society

Spring 2015 – Present

Member, Eta Kappa Nu

Fall 2016 – Fall 2018

Member, Society of Women Engineers

Fall 2015 – Fall 2018

Member, American Institute of Aeronautics and Astronautics

Fall 2015 – Spring 2016

Skills

Software and Programming Languages:

Proficient: MatLAB, Microsoft Office, COMSOL, SolidWorks, C, Multisim, Eagle CAD

Familiar: LTSpice, AutoCad, OPUS, Xilinx ISE, TI MSP430 assembly, TI Code
Composer for MSP430, HTML

Instrumentation:

FTIR spectrometer, oscilloscope, function generator, DC power supply, digital multimeter, vibrating sample magnetometer, pulse magnetizer, LCR, gaussmeter, 3D printer, amplifier, impedance analyzer, soldering iron, 4-point probe

Microfabrication:

Photolithography, DRIE, electroplating, screen printing, spin coater, plasma chamber, sputter, e-beam evaporator, ALD, tube furnace

Languages:

Fluent in English and Spanish