Matthew Feldman

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EDUCATION

University of Florida, Gainesville, FL

December 2014

Bachelor of Science in Electrical Engineering

Minor in Physics, concentration in Japanese Language

GPA: 3.96/4.0

Financed 100% of college tuition with merit-based scholarships

INDUSTRY

Avionics Integration Intern, Hawthorne

CA August 2012 - December 2012 and May 2014 - August 2014

SpaceX, Hawthorne, CA

- Developed Altium extensions in C# and Python with unsupervised learning algorithms for streamlining the avionics design process
- Worked on thermal imaging systems on Falcon 9 Reusable to improve reliability and reduce cost
- Designed harnesses and data acquisition circuit boards for flight on Falcon 9 Reusable and Dragon
- Compiled data on various electronic interfaces for all current and future satellite missions
- Developed and qualified proprietary avionics systems to improve safety and reliability of all future Falcon 9 and Falcon Heavy flights

Sponsored Engineer, Integrated Product and Process Design Program

August 2013 - May 2014

Stryker Sustainability Solutions at University of Florida, Gainesville, FL

- Lead and worked in a multidisciplinary team of engineers
- Designed, manufactured, and tested an embedded system and fixture to rapidly test circuitry of ultrasonic surgery tool.

RESEARCH

Optics in the City of Light REU Researcher, Biophotonics Group

May 2013 - July 2013

Institut d'Optique, Palaiseau, France

- Constructed 3-dimension Full-Field Optical Coherence Tomography setup for cell-level biological studies
- Characterized spherical aberration and image quality degradation as a function of conjugation position by programming LabVIEW control system and Matlab data-processing script

NanoJapan REU Researcher, Ajayan Lab

May 2012 - August 2012

Rice University, Houston, TX

- Enhanced batteries and supercapacitors by creating new nanostructures and graphene coating using chemical vapor deposition
- Grew and transferred graphene samples for international collaboration projects on graphene device

REU Researcher, Materials Research Institute

May 2011 - August 2011

Pennsylvania State University, State College, PA

- Designed and fabricated tunable microchip coils, using CST Microwave Studio to assess model feasibility and a Vector Network Analyzers for hardware testing.
- Scanned small-scale phantoms using an MRI machine and newly-designed 600MHz microchips to improve tools available to biologists and antenna designers, with results published in yearly journal

LEADERSHIP

Founder, "Five for Tanzania" Charity Fundraiser for Rhotia Valley, Tanzania

September 2010 - Present

University of Florida

Raised \$2000 for the Rhotia Valley children's home and \$1000 for tsunami victims in Japan during personal "joggling" (running and juggling) world record events.

ACHIEVEMENTS

Commissioned Student Ambassador to Miyazu, Japan for the city of Delray Beach, FL April 2008 - June 2010 **Guinness World Record Holder**, Fastest 5k while juggling 5 objects May 2011 Guinness World Record Holder, Fastest 400m while juggling 5 objects July 2011 Guinness World Record Holder, Fastest mile while juggling 5 objects **July 2012**

AFFILIATIONS

Member, IEEE Professional Engineering Society Member, Student Small Satellite Design Club

October 2010 - Present November 2010 - December 2011

Benton Engineering Council Representative, Gator Amateur Radio Club

January 2011 - December 2011

Licensed Amateur Radio Technician

January 2011 - Present