

## EDUCATION

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- **University of Florida** Gainesville, FL  
*Doctor of Philosophy; Emphasis: Cybersecurity; Advisor: Patrick Traynor; GPA: 3.6* *Projected: 2021*
- **Florida International University** Miami, FL  
*Bachelor of Science, cum laude, Computer Engineering* *Fall 2015*

## RELEVANT GRADUATE COURSES

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- Introduction to Data Science, Computer Networks Security, Introduction to Cryptography, Computer Information Security, Mobile Security, Engineering Entrepreneurship

## SKILLS

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- **Programming Languages:** Proficient: (Python, Java); Familiar: (MATLAB, C, JavaScript, SQL)
- **Technologies:** Software: (L<sup>A</sup>T<sub>E</sub>X, Git, MongoDB, Spark, Audacity); OS: (Android, OS X, Ubuntu, Windows)
- **Languages:** Spanish (native), English (fluent)

## EXPERIENCE

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- **Ph.D. Student – Research Assistant** Gainesville, FL  
*University of Florida* *June 2016 – Present*
  - Researched the SMS usage of many online services based on 900,000 messages sent to public gateways. We uncovered phone verification fraud, poor entropy generation of one-time codes and sensitive information being sent over an insecure medium
  - Designed a system that can detect caller ID spoofing before a person picks up the phone using strong cryptographic authentication
  - Proposed and implemented a systems that uses time, instead of a secret, as the encryption mechanism (i.e., fast encryption/slow decryption) to protect long term data at rest
  - Developed a data pipeline (all aspects of E.T.L. and data warehousing) and analyzed traffic from a real hospital network to detect and classify potentially compromised devices
- **Flight Controls R&D Intern** Mountain View, CA  
*NASA Ames Research Center* *Fall 2014 and Summer 2015*
  - Researched possible function allocations in aircraft separation assurance to support future growth for air traffic controllers
  - Created MATLAB automated scripts to compare and streamline the metric analysis process of multiple simulations with various parameters
  - Created JavaScripts to dynamically view simulation data gathered in order to find bottleneck points and macro patterns in the airspace traffic
  - Gave multiple technical presentation to a room full of researchers to convey ideas and progress
- **Management Assistant and IT Support Technician** Miami, FL  
*PAL Supports & Services Corp* *June 2013 – August 2016*
  - Quoted and purchased aircraft parts as part of the procurement process
  - Managed a secure wireless network and made software/hardware upgrades to the computers in the office
  - Performed troubleshoot and solved technical problems ranging from printer issues to back up of data and installment of new operating systems
- **Manufacturing Engineering Systems Intern** Dearborn, MI  
*Ford Motor Company* *Summer 2014*
  - Processed and refined Big Data from the Connected Vehicle Analytic Challenge using High Performance Computing and SQL scripting
  - Trained Natural Language Processing models to support more accurate business output from Securities and Exchange Commission files
  - Installed a distributive computing network that allowed faster processing of manufacturing Big Data that improved processing to 60% of the original time