

Phone: (305) 934-4931  
Email: lvarg025@gmail.com

# Luis Vargas

## Education

**University of Florida**, College of Engineering, Gainesville, FL Expected 2020  
Doctor of Philosophy in **Computer Science**  
Emphasis: Cyber Security

**Florida International University**, College of Engineering, Miami, FL Fall 2015  
Bachelor of Science in **Computer Engineering**

## Skills

- Software: Git, LaTeX, Spark, Android Studios, MongoDB
- Programming Languages:
  - Proficient: Python, Java
  - Familiar: MATLAB, C, JavaScript, SQL
- Bilingual – English and Spanish

## Professional Experience

**University of Florida** June 2016 – Present  
*Research Assistant*

- Analyzed the SMS usage of many online services based on over 900,000 messages found in public gateways. The results uncovered phone verification fraud, poor randomness in the generation of one-time codes and sensitive information being sent over an unsecure data channel
- Designed an Android based system that uses strong cryptographic authentication to assure the identity of a caller before answering the phone. The result of this experiment minimizes CallerID fraud (Patent Pending)
- Built a continuous delivery aggregation pipeline for network traffic data, blacklist information, and IP Location data storage. I then used this data for anomaly detection and to find possibly compromised computers inside a hospital network
- Designed a time-based encryption systems that ensure data will be secure for a user-defined time even if the file is compromised

**PAL Supports & Services Corp** June 2013 – Aug 2016  
*Management Assistant and IT Support Technician*

- 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

**NASA Ames Research Center** Aug 2014 - Dec 2014, June 2015 - Aug 2015  
*Flight Dynamics, Trajectory and Controls Research and Development Intern*

- Researched possible function allocations in aircraft landing trajectories in order to support future growth expansion in aircraft traffic. The result helped pinpoint key factors that determine the efficiency of airborne schedulers
- Created MATLAB automated scripts to compare and streamline the metric analysis process of multiple simulations. The script drastically reduced the analysis time spent per simulation
- Created JavaScripts to dynamically view simulation data 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 of the research

**Ford Motor Company** May 2014 - Aug 2014  
*Manufacturing Engineering Systems Intern*

- Analyzed telemetry data from cars (dataset over 2TB) in order to develop optimal driving speed during rush hour in highways
- Implemented various natural language processing techniques to output business related results from SEC filings
- Installed a distributive computing network that allowed faster processing of manufacturing Big Data that improved preprocessing to 60% of the original time