

Jean D. Louis

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EDUCATION

Ph.D., Computer Science

University of Florida, Gainesville, FL

May 2024

Bachelor of Science in Computer Engineering

University of Florida, Gainesville, FL

May 2019

GPA: 3.3/4.00

SKILLS

- **Computer:** Android studios, Xmega Microprocessor, Atmel Studios, ROS, Solid Works, Blue Prism
- **Programming Languages:** Java, Python, C++, HTML, JavaScript, CSS, SQL
- **Languages:** French(conversational) and Haitian Creole(fluent)
- **Relevant courses:** Digital Logics, Microprocessors, Computer Organization, Operating System, Software engineering, Data Structures and Algorithms, Machine Learning, Mobile networking, IoT privacy and security

EXPERIENCE

Work Experience

IBM T.J. Watson Research Center, Intern –Distributed AI

MAY 2019 - August 2019

- Used machine learning to identify a device's classification of IoT or not based on the network traffic it produced
- Filtered and preprocessed millions of lines of internet traffic to produce training data for the machine learning model
- Implemented techniques to improve the explain-ability of the model's prediction such as LIME
- Reached 99.9% accuracy at determining if the traffic sequence was produced by an IoT

United Technology Corporation, Intern –Robotic Process Automation (RPA)

Jun 2018 - August 2018

- Worked on the Robotic Process Automation team to create computer bots to handle high volume and repetitive computer task using a software call Blue Prism
- Worked directly with the finance team to automate several processes such as loading and validating currency exchange rates to different internal applications for each month

General Electric Power, Intern – Predix Platform

May 2016 - August 2016

- Used Predix Java App development for the Industrial internet of Things, to create smart and connected hardware
- Performed code testing through developing JUNIT test in java
- Worked on controls latter logic that would interface with the Predix app for a gas turbine

Research

Dr. Juan Gilbert's HXR lab- World's first Brain Drone Race Competition

August 2015 - present

- Lead a team of 9 undergraduate students to organize the second Brain Drone Race in the world with 16 selected competitors and about a \$5,000 budget
- Used EEG head set to collect the brain signals that are generated when a person thinks forward, for example, and then map that to drone commands using a Brain Computer Interface (BCI) device
- Implemented the DJI Phantom Drone SDK to communicate with the drone about race events and brain commands

School Projects

July 2017 – May 2018

- Modified a Linux kernel to create custom system calls for the Linux Operating System
- Implemented USART communication protocol on the Xmega chip to allow users to communicate with the microcontroller through a command line interface.
- Implemented ADC/DAC to communicate the voltage seen by a photo resistor to a computer screen
- Created a basic Arithmetic Logic Unit (ALU) in Quartus which later integrated into a small CPU design

Personal Projects

Solar Power

August 2015-present

- Combining art and engineering by using flexible solar panels to create plant like solar charging stations
- Created a solar tracker with light dependent resistors and a camera pan-tilt system which will then use a particle photon (wi-fi enabled micro controller) to communicate to an android app, backed by Firebase

Java Calendar Application

August 2014 – present

- Working on an app in Android Studios to take in student schedules, automatically cross-reference it with their friends on the app, and then generate the time that they are both available.

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LEADERSHIP

National Society of Black Engineers (NSBE) Hacktivist, Workshop/Mentor

January 2016 -present

- 1st place NSBE region 3 fall 2017 Hackathon team member
- created a 3-part workshop series focused Internet of Things (IoT) and introduce about 80 college and high school students to hands on experience with building IoT devices
- Personally mentor 4 Computer Science and engineering students, on career and school options as well as web and app development on Android