

# Stanley Celestin

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## EDUCATION

### Doctorate of Philosophy in Computer Science

May 2024

Cornell University, Ithaca, New York

### Bachelor of Science in Computer Engineering

May 2019

University of Florida, Gainesville, Florida

**Areas of Interests:** Robotics, Human-Robot Interaction, Formal Methods

**Languages:** English (Proficient), Haitian Creole (Fluent), French (Conversational), Spanish (Basic)

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## RELEVANT EXPERIENCE & RESEARCH

### SoundPad Lab, Researcher – Gainesville, FL

August 2018 – May 2019

- Examining the proper user interfaces in virtual reality that will enable users to know when to turn to see something that is not in their line of sight
- Determine how music, specifically Greek musical modes, convey emotion in a neural basis

### Microsoft Research, Research Intern – Redmond, WA

May 2018 – August 2018

- Design and implemented a system that combines Microsoft Airsim and Facebook Detectron to do real time object detection and classification in a simulated environment
- Determine where current models fail to update training data and algorithms for better performance

### General Electric, Technical Product Management Intern – San Ramon, CA

May 2017 – August 2017

- Utilizing AWS Lambda to implement a server-less backend infrastructure for GE's Predix Analytic Catalog in Python
- Refactoring Predix Catalog to ReactJS to create a web application that is faster and has better user experience

### Human Experience Research Lab's Brain Drone Race, Researcher – Gainesville, FL

August 2016 – April 2017

- Utilizing an electroencephalogram (EEG) device to filter brain signals and map it to correct commands that will in turn control the drone
- Implementing computer vision in the DJI phantom SDK and developing a machine algorithm to increase the stability of the drone in flight

### General Electric Power, Controls System Engineer Intern – Greenville, SC

May 2016 – August 2016

- Developed company software that automates the requisition process for gas turbines systems logic design
  - Created customized control logic for customer sites ranging from Anti-Icing systems to Seal Oil Pump Systems
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## SELECTED PROJECTS

### GliderHack, Microsoft Hackathon

June 2018

- Developed telemetry software for the Arduino Teensy Board to navigate a glider using thermal information to maintain time in air

### Sky Cam, Python & Tensorflow

February 2018 – April 2019

- Developed learning algorithm that recognizes red cars, white cars, pools, and lakes from aerial images
- Utilized convolution neural network to train on 20x20 samples of objects of interests

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- Evalumate, MEAN Stack – Scrum Master** **August 2017 – December 2017**
- Led a team of seven in the development of a web-application that allows users to gauge different aspects of their emotional and relational state by taking emotional maturity assessments and romantic attraction assessments
  - Responsible for developing the assessments module end to end and the base application that is the foundation for other features the group is working on

- Career Game, MEAN Stack - 1<sup>st</sup> Place NSBE Region 3 Hackathon** **November 2017**
- Created web application for students to share successful steps that lead to a professional opportunity to help up and coming professionals to reach similar success
  - Featured company specific artificial intelligent agent relaying relevant company information such as company culture to user through a messaging interface

- Webscraper & Webcrawler, Python** **May 2017 – August 2017**
- Creating script that starts at an initial iTunes app online, scrapes for all suggested apps, follows those apps to a certain depth levels, and return a list of all suggested apps

- Text Threat Assessment, Programming Fundamentals I** **September 2015 – October 2015**
- Created a program that filters text messaging content, based on set criteria, to determine if a student is likely to be a crime suspect
  - Versioned this program to determine crime likeliness using a time, location, and heart rate filter

### **LEADERSHIP & INVOLVEMENT**

- Management Leaders for Tomorrow, Program Fellow** **July 2016 – November 2017**
- Selected as one of 350 for an 18-month professional development program for high-achieving diverse talent completing business case studies and intensive assignments to hone analytical, quantitative and communication skills
  - Participate in four seminars hosted by industry leaders, such as Deloitte, Google, Goldman Sachs, Procter & Gamble and Target

- National Society of Black Engineers, Secretary** **April 2016 – April 2017**
- Collaborate with the executive officers to determine actions necessary to continue the growth of the gator chapter
  - Lead a team of five responsible for communication to over 200 members for events, meetings, and programs via email blasts, social media engagement, and tabling

- University of Florida's Institute of Black Culture, Ambassador – Gainesville, FL** **October 2014 – October 2016**
- Organize event themes, staffing, venues and promotion for weekly to semester programs, Events include: think tanks, leadership conferences, and culturally engagements focused on the Black experience at the University of Florida
  - Maintain front office efficiency and organization through printing documents and servicing anyone that visits

- National Society of Black Engineers, Benton Engineering Council Rep & Senator** **April 2015 – April 2016**
- Responsible for informing e-board and general body members of activities within the College of Engineering and regional conference
  - Relay information to NSBE chapter executive through emails and direct meetings to keep good relations with the council

**National Society of Black Engineers**, Committee Member

**September 2014 – April 2015**

- Aided in coordination of the logistics for Fall Regional Conference that resulted in bringing over 40 members to the conference
- Participated in TORCH, in which small engineering projects were brought to children in Gainesville at the Eastside Recreational Complex

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### TEACHING & VOLUNTEERING

**Lead Instructor**, Hacktivist– *Gainesville, Florida*

**February 2018 – April 2018**

- Taught programming and computer science fundamentals to engineering students at the University of Florida using Python to introduce students to natural language processing

**Lead Instructor**, Code It Day – *Gainesville, Florida*

**March 2018**

- Taught programming and computer science to elementary and middle school students in Gainesville
- Utilized kit to teach students how to put a computer together and the basic building blocks of programming, from variables to loops and lists

**Assistant Instructor**, P4H Global – *Cap Haitian, Haiti*

**May 2018**

- Plan and engage in sustainable programs ranging from youth leadership development, children's activities, health education, and English language practice
- Served as translator between creole speakers and non-creole speakers

**Assistant Instructor**, Hidden Genius – *Oakland, California*

**June 2017**

- Assisted in teaching Python and walking students through examples within the context of preparing a data set for fitting a ML algorithm
- Taught high level overview of Machine Learning principles with explanation and tutorial of linear regression

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### SKILLS & RELEVANT COURSES

- **Languages:** Java, C++, Swift, Python, NodeJS, AngularJS, ReactJS, CSS, HTML, Django
- **Frameworks & Libraries:** MongoDB, Express, Bootstrap, CSS, AWS, Tensorflow, Git, Anaconda, Spyder, Jupyter
- **Computer Science:** Data Structures & Algorithms, Discrete Math, Natural Language Processing, Artificial Intelligence, Computer Organization
- **Electrical Engineering:** Statistics and Probability, Machine Learning, Digital Logic Microprocessors, Signals and Systems, Circuits

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### FELLOSHIPS, AWARDS, & HONORS

- Alfred P. Sloan Foundation Fellowship, *Cornell University*
- Machen Florida Opportunity Scholar
- Florida Bright Futures Medallion Scholar
- John Deere Corporate Scholar
- NSBE Fulfilling the Legacy Scholar
- Chevron Corporate Scholar
- General Electric AAF/Lloyd Trotter Scholar
- Northrop Grumman Corporate Scholar
- Lockheed Martin Corporate Scholar