

# McNels Sylvestre

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## EDUCATION

### Florida Institute of Technology

Melbourne, FL

B.S. Software Engineering | GPA: 3.69/4.0

Jan 2016 - May 2019

**Relevant Coursework:** Software Requirements, Software Metrics and Models, Software Design Methods, Linear Algebra, Operating Systems, Computer Networks, Human Factors, Discrete Mathematics, Probability and Statistics, Data Structures and Algorithms

**Involvement:** ACM PR Officer, CS Help Desk, MLH Local Hack Day Organizer, ICPC volunteer

**Honors:** Phi Kappa Phi, Phi Eta Sigma (Webmaster), Tau Beta Pi (Secretary), Upsilon Pi Epsilon, Dean's List (every semester), Outstanding Senior in Software Engineering, Outstanding Representative of the Capstone Class, Cum Laude Graduation Honors

## SKILLS & INTERESTS

### Technical

C++, HTML, CSS, JavaScript, Java, Git, Firebase, Ruby, Python, Bash, MySQL, Linux, Windows, macOS, Terminal, Swift, XCode, APIs, JSON, Adobe XD

### Soft Skills

Technical Documentation, Effective Communication, Teamwork, Problem-solving, Time Management, Customer Service, Technical Support, Fast Learning

### Spoken Languages

English, French, Spanish, Haitian Creole

### Interests

Information Security, Networking, Embedded Systems, Data Visualization, App Development, Human-Centered Design, Neuroscience, Sports, Music

## WORK EXPERIENCE

### Florida Institute of Technology

Melbourne, FL

Research Assistant - Dept. of Computer Engineering and Sciences

Feb 2019 - May 2019

Advisor: Dr. Chul-Ho Lee

- Apply hierarchical clustering to a large dataset for systems event classification and anomaly detection
- Analyze large message-based datasets in Python with pandas, matplotlib, scipy and sklearn libraries
- Compare common machine learning techniques and algorithms used in event classification and cluster correlation

Grader/Teaching Assistant – Dept. of Computer Engineering and Sciences

Jan 2019 - May 2019

- Prepare evaluation materials for a class of 50 students
- Review, correct, and grade homework submitted by students in Operating Systems Concepts course

LMS Support Assistant – Continuing Education Department

May 2017 - Feb 2019

- Responded to student questions via email, troubleshoot and logged issues in Salesforce
- Prepared reports utilizing survey data to meet accreditation requirements
- Assisted with the preparation and improved maintenance of the Learning Management System (LMS) used for online courses with HTML, CSS and JavaScript
- Automated existing processes to improve user experience with Ruby scripts and Canvas LMS API

## PROJECTS

### Form Buster - Senior Project

Sep. 2018 – Apr 2019

- Involved in writing Requirements, Design and Test documents for the project
- Implemented an authentication system (email and password) for the website using Firebase
- Designed and contributed to the implementation of a NoSQL database to hold user information
- Interacted with the university's API to improve user experience using HTML/CSS and JavaScript
- Developed a fully functional website, 94.1% of potential users of which recommended the university to use over the current system

### OS161 - Operating Systems Course

Jan 2018 – Apr 2018

- Added various system calls to the BSD-like operating system using C
- Implemented a scheduler to provide control over the execution of the different running processes
- Implemented a fork system call from scratch to use memory more efficiently

### AutoSAD - Continuing Education at Florida Tech

Oct 2017 – Mar 2018

- Pulled students page views activity during tests from Canvas API using HTTP requests and generated automatic reports for all students taking online courses
- Automated existing academic honesty check system for Florida Tech's Continuing Education Dept. and improved its efficiency by 80%

### ingine - iOS Application/Startup

Feb 2017 - Present

- Created requirements, design and test documents for mobile AR application and databases
- Drafted business plans, revenue models, and communicated with investors and collaborators
- Built iOS prototype app that calculates the similarity between two user-provided images using ARKit