

# McNels Sylvestre

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## EDUCATION

### Florida Institute of Technology

*B.S. Software Engineering*

**Melbourne, FL**

*Graduation: May 2019*

**Honors/Activities:** 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

## SKILLS & INTERESTS

**Languages:** C++, Python, HTML, CSS, JavaScript, Swift

**Platforms:** Linux, Windows, iOS, macOS

**Tools/Frameworks:** Git, SVN, Firebase, Virtual Machines, Atlassian Tools, Wireshark, Google Test, XCode, Adobe XD, ARKit

**Concepts:** Agile Methodologies, Testing, Augmented Reality

**Verbal:** English, French, Spanish, Haitian Creole

**Interests:** Information Security, Networking, Embedded Systems, Data Visualization, Human-Centered Design

## EXPERIENCE

### Collins Aerospace

*Associate Software Engineer*

**Melbourne, FL**

*Sept 2019 - Present*

- Participate in requirements gathering, code and design reviews, issue tracking and daily scrum meetings
- Developed graphical utility tool to generate feature keys from scanned serial numbers using Qt
- Develop features needed for Satellite Communications unit

### Alstom

*Software Engineer*

**Melbourne, FL**

*June 2019 - Aug 2019*

- Participated in requirements gathering, code and design reviews, issue tracking and daily scrum meetings
- Programmed sockets to listen for data coming from embedded devices and sniffed packets using Wireshark
- Built multithreaded application that decompressed, parsed and validated data to be used by Analytics team
- Configured, integrated and deployed apps on embedded devices in the field remotely using Docker

### Florida Institute of Technology

*Research Assistant - Dept. of Computer Engineering and Sciences*

**Melbourne, FL**

*Jan 2019 - May 2019*

- Applied hierarchical clustering to a large dataset for systems event classification and anomaly detection
- Analyzed large message-based datasets in Python with pandas, matplotlib, scipy and sklearn libraries
- Compared common machine learning techniques and algorithms used in event classification and cluster correlation
- Reviewed, corrected, and graded 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
- Improved front-end look of the LMS used for online courses using HTML, CSS and JavaScript
- Automated existing processes to improve user experience with Ruby scripts and Canvas LMS API

## PROJECTS

### Form Buster - Senior Project

*Sept 2018 – Apr 2019*

- Involved in writing Requirements, Design and Test documents for an online Forms Tracking System
- Designed and contributed to the implementation of a Firebase NoSQL database to hold user information
- Developed a fully functional website, 94.1% of potential users recommended the university to use over the current system

### 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/Website

*Feb 2017 - Present*

- Created requirements, design and test documents for the 'ingine' iOS AR application and databases
- Drafted business plans, revenue models, and communicated with investors and collaborators
- Brought iOS app that allows users to create and share AR experiences using ARKit and Firebase to App Store
- Received initial investment for realization of the application and the website