Bryon F. Catlin III

(941) 740-4236 | bryon.catlin@gmail.com | https://www.linkedin.com/in/bryoncatliniii | Port Charlotte, FL (Open to relocate)

EDUCATION

Florida Polytechnic University GPA: 3.95

Lakeland, FL

Bachelor of Science: Computer Engineering, President's List

May 2025

May 2022

<u>Related Coursework:</u> Autonomous Robotic Systems, Circuits I/II, Control Theory, Digital Logic Design, Digital Electronics, Digital Signal Processing, Intro. to Programming (C), Microprocessors (Assembly), Object Oriented Programming (C++), Systems and Signals

Florida SouthWestern State College GPA: 3.9

Punta Gorda, FL

Associate in Arts, Dean's List

Related Coursework: Calculus I/II, Introduction to Computer Programming (Python), Macroeconomics

PROFESSIONAL EXPERIENCE

Overhead Intelligence | Associate Computer Engineer | Lake Wales, FL

August 2024 - Current

- Developed embedded systems software and programmed in C/C++
- Integrated Hardware/Software systems through Hardware/Software codesign

Overhead Intelligence | Computer Hardware Engineer Intern | Lake Wales, FL

October 2023 - August 2024

- Developed photogrammetry image processing tool to process 1000+ images in less than one hour
- Deployed AWS cloud development tools such as AWS API Gateway, Cloudwatch, EC2, Elastic Beanstalk, Lambda, and SQS
- Increased productivity by 70% through developed automated processes such as Linux, scripting, C, Python, and git
- Streamlined automation and utilized Linux operating systems to reduce cloud processing costs by 93%
- Designed Printed Circuit Boards and performed circuit analysis/calculations
- Ensured code versioning and documentation/tracking via git
- Developed using tools such as: SPI, CAN, USB, and USART communication protocols
- Professional skills: Documentation, technical writing, cybersecurity, teamwork, communication, and field testing

Ultra-Tech Enterprises, Inc. | Computer Engineering Intern | Port Charlotte, FL

May 2023 - August 2023

- Automated testing processes through scripting and pipelining to increase production & reliability by 80%
- Engineered embedded systems solutions using SPI, I2C, and Serial Communications
- Documented project usage, troubleshooting, and operation manual

SKILLS & CERTIFICATIONS

Certifications: FAA Small UAS - Part 107 License

Programming: Advanced: C, C++, Python, JavaScript, embedded software, Verilog/VHDL, HTML, CSS Intermediate: C#, Rust **Software**: KiCAD, HSpice, MATLAB, Simulink, Solidworks, OnShape, Microsoft Excel, Microsoft Word, Microsoft PowerPoint **Hardware**: Circuit/PCB design, soldering, and repairing/replacing electronic components

PERSONAL EXPERIENCE & PROJECTS

Phoenix Racing Team Lead: Solar Powered Endurance Vehicle

Fall 2022 - Fall 2024

- Led a subgroup to develop a solar vehicle placing higher than 70% of competition at Formula Sun Grand Prix
- Completed circuit diagrams and efficiency calculations
- Designed, planned, and assembled solar array setup for optimal voltage/current output

Motion Controlled Quadcopter (AVR C)

Spring 2024

- Developed embedded C flight and motor controller
- Utilized control system feedback loops to stabilize quadcopter in flight
- 3D printed and designed mounting components and propellers

Discord Bot: Javascript

Fall 2023

- Natural Language Processing: Used ChatGPT DaVinci API to autocomplete sentences
- Programmed a chat helper bot through the Discord.js API. Hosted on a raspberry pi Single Board Computer

VOLUNTEER EXPERIENCE

Rotaract International, President | Florida Polytechnic University | Lakeland, FL

November 2022 – Current

- Communication and professionalism skills: Lead meetings and manage club roles/duties
- Networking: Assisted with the growth of our club's mentorship program
- Raised over \$5,000 in fundraised and sponsored funds
- Increased official membership and meeting attendance by 200%

Society for Hispanic Professional Engineers, VP Professional Development | FL Polytechnic Uni. | Lakeland, FL June 2024 – Current

· Performed event planning, club support, promoted membership and professional development