



CASEY NATHANSON

US Citizen · CaseyJNathanson@gmail.com · (352) 638-2523 · <https://caseynathanson.com/>



EDUCATION

Embry-Riddle Aeronautical University

Bachelor of Science Electrical Engineering | Minor in Systems Engineering *GPA: 3.46*

Daytona Beach, FL

2024 - 2028

Lake Sumter State College

Associates Degree *GPA: Summa Cum Laude*

Leesburg, FL

2022 - 2024

Leesburg High School

GPA: Summa Cum Laude

Leesburg, FL

2020 - 2024

SKILLS

Embedded Systems:	Verilog - FPGA: Vivado, Basys 3, ESP32 Microcontrollers, C, Assembly
Embedded Systems Cont.:	UART, STM32 Microcontrollers, CubeMX, CubeIDE, Arduino
Hardware Design:	KiCAD, EAGLE, Circuit Design, Testing, PCB Layout
Software & Programming:	MATLAB, PHP, Javascript, Linux (Debian, Ubuntu, RHEL), GitHub
Systems Engineering:	Trade Studies, Risk Analysis, Requirements Definition
Project Management:	Jira, SCRUM, Microsoft Sharepoint/Powerapps/Power Automate
Relevant Course Work:	Digital Circuit Design, Microprocessor Systems, Physics 3, Systems Engineering

PROJECTS

Project NODE KiCAD

Designing a portable, three-node network platform for cybersecurity testing. Engineering a custom PCB power supply, configuring embedded network nodes, and developing system firmware. Gaining hands-on experience in circuit design, embedded systems integration, and secure network implementation.

Computer Numerical Control (CNC) Systems Mach3, GRBL

Operated and maintained industrial CNC routers, fiber lasers, and CO2 lasers. Calibrated control systems and integrated Mach3 and GRBL interfaces for precision manufacturing workflows.

Makerspace Order Management Platform PHP

Developed and deployed a web-based platform to manage 3D print orders and production workflow at the ERAU Makerspace for improved tracking and to reduce order processing time by automating status updates.

Autonomous Line Following Robot Arduino

Designed and programmed a mobile robot to autonomously follow a path using optical sensors. Designed and implemented line-tracking algorithms and remote connectivity for telemetry and control.

WORK EXPERIENCE

BYTE BROADBAND

Founder

Central Florida

2022 - Present

- Founded and manage a telecommunications company providing fiber internet, TV, and VoIP services.
- Designed and deployed network infrastructure, including fiber backhaul, routing, and customer installs.
- Oversaw system integrations, web development, and IT solutions for small business clients.
- Led a technical team in project construction, execution, troubleshooting, and service delivery.

Center for Innovation and Entrepreneurship - Embry-Riddle

Business Development Coordinator

Daytona Beach, FL

2025 - Present

- Advise student entrepreneurs on product development and technical feasibility.
- Collaborate with multidisciplinary teams to structure business and engineering roadmaps.

AWARDS, LEADERSHIP, AND SERVICE

Honor Roll Designation

Embry-Riddle Academic Affairs

2025

Dean's List

Embry-Riddle College of Engineering

2024

Sunshine State Scholar

Recognized as one of Florida's top scholars going into a STEM field.

Florida Department of Education

2023

Eagle Scout

Led the construction and refurbishment of over \$15,000 in computer equipment for homeless youth.

Boy Scouts of America

2022