

I am a technical team lead leveraging extensive hands-on experience. Skilled in both software and hardware troubleshooting with ability to organize project logistics for field operations, shipments and equipment requirements.

A trusted and collaborative team player, able to facilitate skills development and build cross compatible teams. Efficient, logical, diligent, reliable, and autonomous with excellent communication abilities.

Education

École de Technologie Supérieure

Information Technology Engineering (B.Eng.)

GPA : 3.9

2021 - Current

Specialized in IT security and computer vision applications.

École Nationale d'Aérotechnique

Avionics

2015 - 2018

- Student Ambassador: Represented the school at educational events and organized tours and live demonstrations for visitors
- Technical Tutor: Subjects included radio communication, radio navigation, electrical distribution, alternating current, semiconductors and English.

Work Experience

CAE

Aircraft Systems Software Developer (Internship)

2022

Developed a modern weather radar system from aircraft documentation and regulatory specifications and fully tested the functionality on production hardware. Finally, I presented a functional demo to key project stakeholders and received very positive feedback.

TRU Simulation

Field Service Engineer (in collaboration with Boeing)

2020

Worked on-site directly with Boeing for several months, resolving over 150 open software and hardware snags and tickets while maintaining testing and training readiness on all 737MAX devices.

- Developed fixes in collaboration with engineering department, tested and incorporated service bulletins while creating documentation for future reference.
- Tested and tuned simulation characteristics and delivered results to Boeing for FAA recertification of the 737MAX.
- Company ceased operations due to COVID-19 pandemic, leading to end of employment

TRU Simulation

2018 - 2020

Simulator Integration and Installation Specialist

Led small teams and executed on-site activities for clients worldwide on various models of aircraft and product configurations. Tested all simulator systems, including electronic, electrical, mechanical, pneumatic and hydraulic assemblies as well as IT network, audio, logic controller, servo control loading and avionics subsystems.

- Troubleshoot on-site and remotely worked with customers, making necessary repairs to bring the simulator up to ICAO, FAA and EASA qualification standards.
- Managed training of 4 to 5 new hires per year; provided departmental training on specific simulator and aircraft subjects and authored technical documentation for company wide use. This enabled quicker onboarding, team integration efficiency in onsite activities.
- Collaborated directly with the aircraft manufacturer and key suppliers for in-plant development and on-site installation of next generation aircraft simulators and visual systems for the Boeing 777X Program and the Airbus A350 WXB.

Air Transat

2017

Avionics Technician (Internship)

Troubleshoot and made necessary repairs on Airbus A330, A310 and Boeing 737 aircraft. Worked with team on complete cabin modification of two Airbus A330s.

Projects

NextBus

2023

An IoT device that lets you know when the next bus is arriving

- ESP32 microcontroller client device with MicroPython framework.
- Python server component running on auto-deployed cloud docker image.

Computer Vision Flow Measurement Tool

2023

A tool to parse high framerate video to measure fluid displacement and extrapolate flow rate

(Python, OpenCV, Computer Vision, Image Processing)

Technologies

- Software: Python, Java, C++, Git, Vault
- IT: Docker, Cloud (Heroku, Digital Ocean)
- Security: Kali Linux, Wireshark
- Electronics: NI Multisim, microPython
- Misc: MS Project, Jira

Skills

Personnel Management, Fabrication and Lean Manufacturing, Problem-Solving, Installation and Troubleshooting, Regulatory Compliance, Process Improvement, Coaching, Mentoring and Training, Product Development, Cross Functional Collaboration, PenTesting, Strong Aviation Background