JUSTIN NEHME

SYSTEMS ENGINEERING & INTEGRATION

(514) 707-7808 • Justin.nehme3@gmail.com • JustinNehme.ca • Montreal, QC

PROFESSIONAL PROFILE

Mechanical engineering candidate with experience integrating mechanical hardware, electronics, embedded controls, and manufacturing processes. Contributed to a first-place underwater robotic capstone from subsystem development through integrated pool testing. Works across design, CNC programming, production, and inspection teams to identify interface issues and improve engineering workflows.

ENGINEERING EXPERIENCE

Les Technologies KK | Île-Perrot, QC Feb 2026 – Present

Manufacturing Engineering | Aerospace & Defence Components

- Coordinate across engineering, CNC programming, production, and CMM inspection to address geometric, process, and inspection discrepancies.
- Evaluate GD&T, technical drawings, tooling feasibility, and downstream manufacturing/inspection implications.
- Develop a bilingual process-planning application combining operation libraries, inspection/CTQ requirements, revision control, and routing.
- Design and implement fixtures and manufacturing aids to resolve shop-floor fit, handling, and deformation issues.

WAJAX – Delstar Énergie | Montreal, QC Aug – Dec 2023

Mechanical Engineering Intern

- Supported integration and troubleshooting of sensors on an automated induction-brazing system.
- Redesigned hardware interfaces for ABB robotic taping equipment and worked on General Electric converter assemblies.
- Designed lifting fixtures for 800 kg motor poles and supported maintenance of production and 3D-printing equipment.

SELECTED ENGINEERING PROJECTS

Walter | Integrated Robotic System | 1st Place Capstone
Co-developed a semi-autonomous underwater robot integrating mechanical structures, suction, propulsion, electronics, embedded code, and wired communication; participated in integrated pool testing.

Indestructabox | Mechanical System Design
Used CAD, FEA, and BOM organization to develop and iterate a protective enclosure for a theoretical 40 km/h impact event.

Thermoelectric Vehicle | Subsystem Optimization
Worked on 3D-printed chassis design, vehicle performance, and thermal drivetrain efficiency.

TECHNICAL SKILLS

System integration: Electromechanical prototyping, subsystem interfaces, integration testing, sensor troubleshooting.
Engineering coordination: Cross-functional issue resolution, drawing/requirement interpretation, process documentation, CTQ.
Technical tools: SOLIDWORKS, Inventor, Fusion 360, Arduino, C++, ESP32, CAD assemblies, 3D printing.

EDUCATION & ADDITIONAL EXPERIENCE

Concordia University | B.Eng., Mechanical Engineering | Montreal, QC | 2021–2026 (expected)

John Abbott College | DEC, Pure and Applied Sciences | 2018–2021

Earlier experience: Automobile Parts Advisor, Canadian Tire (2022–2023); Founder & Lead Technician, Justin's Repair Shop (2016–2018).

Languages: Fluent English and French • **Leadership:** 250+ hours of community volunteering; high-school robotics CAD team.