

Mahjoub Ghoudi

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🗣️ Native Language: Arabic

EDUCATIONS

École de Technologie Supérieure (ÉTS)

Montreal, CA

- *Master's degree with thesis (M.Sc.A.); Electrical engineering*

2017 – 2019

École Nationale d'Ingénieurs de Gabès

Gabès, TN

- *National Engineering Diploma; Automatic Electrical Engineering*
Canadian Equivalency (WES): Bachelor's and master's degree

2011 – 2014

SPECIAL KNOWLEDGES

- **software tools:** Matlab/Simulink, KiCad, FreeCad, Word, RSLogix 500, L^AT_EX, Languge Python, Languge Ladder, Codesys, ISAAC, CRETA, INCA
- **Technical knowledge:** Electrical and electronic systems, Industrial process control and monitoring , automation and control, SAE J1939 heavy-duty vehicle communication protocol, electrification of heavy-duty vehicles.

PROFESSIONAL EXPERIENCES

Bombardier Recreational Product (BRP)

Valcourt, QC, CA

- *CEP Mechatronics Engineering, Sea-Doo*

June 2022 - August 2024

- Develop functional architecture and control and diagnostic functions for vehicle control modules.
- Prepare technical requirement documents for the development of electrical parts and mechatronic systems with suppliers.
- Calculate, analyze and validate various parts and/or groups of parts for one or more systems.
- Validate and approve electrical system drawings, electrical diagrams and engineering drafts.
- Supervise the assembly, diagnosis and validation of prototype vehicles in the workshop.
- Develop and execute test plans to validate technical solutions, taking into account norms and standards.
- Upload software to the various control modules and calibrate mechatronic functions on vehicles, in the workshop and on the water.
- Guide the work of technicians/makers to meet development objectives.
- Collaborate with suppliers in the development of electrical and electronic components, as well as in determining deadlines and standards to be met.
- Collaborate with design, production, purchasing, quality assurance and manufacturing engineering teams.
- Solve production and networking issues and follow up with suppliers.

Effenco Development Inc.

Montreal, CA

- *Customer service representative*

May 2021 - March 2022

- Follow up with customers to ensure their satisfaction.
- Use data visualization tools to proactively identify breakdowns.
- Diagnose the problems encountered and communicate them to the technical experts in order to resolve them.
- Schedule service interventions with customers/fleet managers.
- Schedule and prepare the supply and dispatch of parts to customers/partners.

Acme Engineering Prod. Inc.

Montreal, CA

- *Electronics Engineering Technician*

July 2017 - April 2018

- Develop electrical data acquisition circuits for several gas sensor technologies.
- Design data acquisition circuits using KiCad.
- Write technical reports on the use and calibration of circuits and sensors.
- Participate in the calibration of various gas sensor technologies.

WORK EXPERIENCES

Uber

Montreal, CA

- *Uber Eats delivery driver*

January 2020 - May 2021

- Be active and earn money with a flexible schedule.
- To have the time and means to work on personal projects to improve my skills.
- Explore the city of Montreal.

ETS Gym

Montreal, CA

- *Counter attendant/Appariteur*

February 2017 - December 2019

- Greet customers at the counter.
- Moving and fitting out the room.
- Ensure that all materials, furnishings and equipment are in place.
- Help maintain and calibrate various sports center equipment.

RESEARCH PROJECT

Master's project, École de Technologie Supérieure (ÉTS)

Montreal, CA

- *Design and build an electronic nose prototype based on a system learning and evolutionary recognition of volatile organic compounds*

April 2018 - October 2019

- Design and build an electronic nose prototype using FreeCad and KiCad.
- Define a dynamic and scalable learning and recognition system based on fuzzy inference using Python.

End-of-studies project, École Nationale d'Ingénieurs de Gabès

Gabès, TN

- *Establishing communication between the motherboard (Raspberry Pi & Arduino) and a base station.*

March 2014 - June 2014

- Establish communication between a graphical user interface (GUI) on a computer and a Raspberry Pi board on a drone, using the XBee communication protocol.
- Establish communication between a Raspberry Pi board and an Arduino Uno board using the I2C communication protocol.