

Adnan Amara

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EDUCATION

- **Master of Engineering - Electrical Engineering** Montréal, Canada
École de Technologie Supérieure January 2024 - Now
- **Master of Engineering - Electronics and embedded systems** Algeria
École Nationale Polytechnique d'Oran Maurice Audin December 2020 - July 2023
- **Preparatory classes in science and technology** Algeria
École Nationale Supérieure d'Hydraulique September 2018 - November 2020

SKILLS SUMMARY

- **Languages:** Python, C, C++, SQL, VHDL, Octave, Latex, Matlab, Assembly
- **Frameworks:** Scikit-learn, TensorFlow, Arduino, Mbed, ROS
- **Tools:** GIT, MySQL, Microsoft Office
- **Platforms:** Linux, Windows, Arduino, Raspberry
- **Soft Skills:** Leadership, Writing, Public Speaking, Time Management

EXPERIENCE

- **Instrumentation Intern** Algeria
Sonatrach March 2023 - April 2023
 - **Role:** During my Sonatrach internship, I gained valuable experience in instrumentation and industrial processes, studying the Mark V lubrication system and oil temperature control loop. Hands-on with WinCC, simulating the lubricating oil control loop, enriched my understanding of the oil & gas industry and my growth as an engineer.
- **Automation and Electrical Systems Intern** Algeria
LM Electric June 2022 - July 2022
 - **Role:** In this internship, I was in charge of designing and installing a power supply system using EPLAN and Tia Portal.
- **Maintenance Intern** Algeria
Shariket Kahraba El-Djazair-SKE March 2021 - April 2021 & December 2021 - January 2022
 - **Role:** I had the chance to do 2 internships at the power plant of Berrouaghia SKE, the 1st internship was a discovery internship, the 2nd was more a concrete one by participating directly in the operations of the electrical service such as the repair of electrical machines, installation of electrical cabinets, analysis of batteries and knowing the different protocols and digital communication systems used for the automation of process.

VOLUNTEER EXPERIENCE

- **Muhandis Club** Oran, Algeria
October 2022 - July 2023
 - **Role:** My primary task is to create and curate content that can be shared on the club's social media platforms such as Facebook, Twitter, and LinkedIn, in a way that aligns with the club's mission and message.
- **American Corner Oran** Oran, Algeria
October 2021 - October 2023
 - **Role:** I organized an electronics workshop aimed at introducing the fundamental concepts of electronics to individuals who share my interest in the subject. I also participated in cultural events organized by American Corner. My participation in these events highlights my commitment to promoting cultural exchange and engagement within the community.

PROJECTS

- **Design and Implementation of an embedded electronic and computer interface for localization and navigation of a mobile robot in an unknown environment:** Developed an autonomous navigation system for an indoor mobile robot using the Robot Operating System (ROS). The project involved three key modules: mapping (SLAM algorithm with 2D/3D sensor data), localization (AMCL approach for pose estimation), and planning (utilizing the navigation stack for collision-free trajectory generation and control commands).
- **Temperature Indicator:** A system that takes into account both external and internal temperatures, equipped with two temperature probes, one to be placed outside and the other inside the habitat (both to be kept in the shade). The motivation behind the development of this system stems from periods of high temperatures, during which it is recommended to ventilate the rooms at night and keep them closed during the day.
- **Arduino Based CNC Plotter Machine:** Numerous CNC machines exist globally, with some being highly technical and complex to manufacture or operate successfully. Due to this, the decision was made to construct a straightforward CNC machine based on the Arduino platform, which is by far the easiest to construct.

LANGUAGE PROFICIENCY

- Arabic - native
- English - Full professional
- French - Full professional