Walid Rashad

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This is a link to my portfolio - *Walid Rashad Personal Web Page* // Linkedin

SUMMARY OF SKILLS

- 1 year and 4 months of electrical engineering work experience
- **Programming experience**: Assembly and C - PIC microcontrollers (PIC16F917) and HCS12, Python, VBA, HTML, CSS, JavaScript, MATLAB/Simulink, Raspberry Pi, Arduino
- **Engineering skills**: Automation, Technical documentation, engineering software pertaining to data analysis, PCB design, analog/digital circuits (KiCad, AWR, Feko, MATLAB, Quartus, Multisim, Virtuoso), computer architecture, VLSI/CMOS logic, Lab equipment, EMC in aircraft systems
- Flawless bilingualism
- **Projects:** Conception of a Data Acquisition System to translate Morse code to readable text in a small team, conception of a Search & Rescue robot using Raspberry Pi within a team of engineers, optimization of light retention in a solar panel using Matlab, PID-controlled schematics in Simulink

EDUCATION

Bachelor's degree in Electrical Engineering — September 2020 – April 2025

University of Ottawa, Ottawa (Ottawa, Ontario)

- Teaching Assistant for Integrated Control Systems (ELG4159) – Program and debug PIC devices

JOB EXPERIENCE

Technical Officer — September 2023 – December 2023

Innovation, Science and Economic Development (Ottawa, Ontario)

- Programmed dozens of VBA macros for Microsoft Excel/Access databases, cutting load times by 50%
- Greenlit over 30 project deliverables, coverage maps, and network infrastructure projects
- Spearheaded 2 training sessions on geospatial mapping software, coaching 12+ staff members on leveraging new functionalities and reducing mapping errors by 15% in infrastructure projects
- Cleared for long term security clearance

Electromagnetic Compatibility Intern — January 2023 – April 2023

Bombardier (Montreal, Québec)

- Simulated 3 complex electromagnetic interference scenarios on aircraft harnesses using Altair Feko, identifying crucial vulnerabilities
- Designed custom 2 validation tools to streamline EMC data analysis and measure shielding effectiveness
- Leveraged Python for in-depth data research, uncovering trends and anomalies across 20+ EMC test cases
- Optimized over 55 electrical schematic diagrams to prevent loss of function in aircraft systems

Electrical Engineering COOP Student — May 2022 – August 2022

Canadian Coast Guard (Ottawa, Ontario)

- Conducted comprehensive diagnostics on Coast Guard ship electrical systems and rectified over 60 critical faults, ensuring 100% operational readiness and preventing potential system failures at sea
- In-depth research on 7 renewable energy solutions for future ships/maritime applications
- Redacted and approved over 45 electrical schematic diagrams in less than 2 weeks
- Developed a comprehensive risk assessment strategy for maritime renewable energy integration, identifying 10 critical failure points and informing preventative maintenance strategies across 5 vessels

FURTHER EDUCATION

The Complete Web Development Bootcamp — May 2023 – April 2024

(https://www.udemy.com/course/the-complete-web-development-bootcamp/)

Automotive Engineering: Automobile Fundamentals — August 2022 – July 2023

(https://www.udemy.com/course/automotive-engineering-automobile-fundamentals-and-advanced/)