Chester New

(647) 012 – 3456 | newc104@mcmaster.ca | linkedin.com/cnh104 | Mississauga ON

Highlight of Qualifications

- Enrolled in level 3 of McMaster University's Electrical Engineering Co-op Program, eligible for **4-, 8-, 12- and 16-month co-op placements** starting May 2027
- Experience working with high voltage systems and analysis of power electronics through internships
- Strong background in control systems design and implementing electrical systems in course projects

Education

Bachelor of Engineering Co-op (BEng) | *Electrical Engineering* *2024 – 2029*

McMaster University

- **Relevant courses:** Energy Conversion, Signals & Systems, Control Systems, Electromagnetics, Communication Systems, Electronic Devices & Circuits

Experience

Electrical Engineer Co-op *May 2027 - Aug 2028*

Ontario Power Generation*, Pickering ON*

- Designed and optimized electrical systems and components using AutoCAD Electrical
- Conducted circuit analysis and simulations with MATLAB and Simulink, improving system reliability
- Implemented PLC programming for automation projects, increasing operational efficiency by 20%
- Performed electrical testing and troubleshooting, enhancing system performance by 18%
- Collaborated with cross-functional teams on various projects, showing project management and adaptability skills in team-based environments

Power Engineering Intern *May – Aug 2026*

Hydro One*, Burlington ON*

- Constructed power distribution systems using AutoCAD Electrical, reducing material costs by 10%
- Conducted load flow analysis and simulations with MATLAB and Simulink
- Performed testing and troubleshooting of power systems with other team members, demonstrating teamwork, communication skills and attention to detail in fast-paced settings

Store Associate *May – Aug 2025*

Walmart*, Mississauga ON*

- Created a positive shopping experience for customers by kindly assisting in any inquiries or directions, highlighting communication ability
- Worked closely with coworkers to maintain flow and efficiency, demonstrating teamwork skills in fast-paced settings
- Resolved customer complaints and difficult situations, showing professionalism and problem-solving skills in real-time situations

Extracurricular Activities

Electrical Team Member | *Drone Club* *Sept 2026 – Present*

McMaster University*, Hamilton ON*

- Designed and integrated electrical systems for autonomous unmanned aerial systems (UAS)
- Utilized Altium Designer to create and optimize circuit boards, improving system reliability by 15%
- Conducted circuit analysis and simulations using MATLAB and Simulink to enhance electrical performance and efficiency
- Collaborated with mechanical and software teams to ensure seamless integration of electrical systems, highlighting teamwork and communication skills in technical environments

Executive Member | *Electrical & Computer Engineering Society* *Sept 2025 – Present*

McMaster University*, Hamilton ON*

- Organized monthly events for electrical and computer engineering students, demonstrating management and communication skills
- Managed funding and sponsorship packages for the society, demonstrating financial planning ability
- Impacted engineering society decisions by representing my cohort of electrical engineering students

Projects

Automated Plant Watering System | *Personal Project* *May – Aug 2026*

- Implemented an automated system to monitor soil moisture and water plants using Arduino
- Integrated soil moisture sensors, a water pump, and a relay module to automate watering based on real-time data
- Utilized C programming to develop control algorithms for optimal watering schedules
- Conducted extensive testing and troubleshooting to ensure system reliability and efficiency
- Improved plant care by ensuring consistent watering, reducing water usage by 20%

Self-Diving Toy Car | *Electrical Systems Integration Course Final Project* *Feb – Apr 2026*

- Engineered an autonomous toy car using an STM32 microcontroller, focusing on collision avoidance
- Integrated ultrasonic sensors, a servo motor, and a motor driver to enable obstacle detection and autonomous navigation
- Programmed control algorithms in C++ to process sensor data and adjust the car's movements
- Collaborated with other electrical and computer engineering students, highlighting teamwork, communication and organizational skills in team settings

Skills

Programming Languages: Python, C/C++, PLC, MATLAB, Java, Assembly

Software: AutoCAD & AutoCAD Electrical, Simulink, Altium Designer, PSpice, Autodesk Inventor, SolidWorks, Excel, MS Office, GSuite Applications

Miscellaneous: Multimeter, Oscilloscope, Soldering, breadboard, Arduino, STM32, G-class Driver's license