

Adam Genno, C.E.T., EIT

289-338-9945 | adam.genno@gmail.com

Skills

- **Industry knowledge:** robotics, automation, machine vision, machine learning, mechanical engineering, electrical engineering, troubleshooting, root cause analysis, programming, technical support, project management, budgeting, modeling and simulation, research, nonlinear control
- **Tools & technologies:** AutoCAD, Inventor, CATIA, SolidWorks, MATLAB, Microsoft Office
- **Interpersonal skills:** time management, leadership, teamwork, professional communication, customer service, high degree of initiative, employee training, mentoring, organization skills

Work Experience

Engineering Project Manager

Dec. 2022 – Current

Honda of Canada Manufacturing, Welding (Alliston, Ontario)

- Developed and benchmarked an innovative in-line robotic deburring process to address a significant source of production downtime, potentially saving over \$200,000 annually.
- Managed simultaneous engineering projects with budgets exceeding \$100,000, from initial conceptualization to final commissioning.
- Maintained good records of all engineering activities to ensure effective communication of lessons-learned and reduction similar future project timelines.

Research Assistant

Aug. 2020 – Sep. 2022

Lakehead University, Department of Mechanical Engineering (Thunder Bay, Ontario)

- Lead the preliminary design of a probe-and-drogue aerial refueling system and supervised an undergraduate mechanical engineering student team during subsequent design iterations.
- Developed an original algorithm for the optimization of nonlinear neuro-fuzzy membership function parameters for flexible structure control, achieving 25% overshoot reduction.
- Proposed an original dynamic output suppression technique to reduce 90% of control action-induced vibrations by a neuro-fuzzy controller.

Teaching Assistant

Sep. 2020 – Apr. 2022

Lakehead University, Department of Mechanical Engineering (Thunder Bay, Ontario)

- Prepared course materials for undergraduate mechanical engineering courses.
- Utilized hybrid teaching methods in weekly tutorial sessions for classes of 40-100 students
- Provided timely feedback on marked course materials and student questions.

Student Tutor (Mechanical Engineering and Math)

Sep. 2018 – Jul. 2020

Lakehead University, Chancellor Patterson Library (Thunder Bay, Ontario)

- Tutored students individually and in groups to develop a better understanding of mechanical engineering course concepts.
- Lead the instruction of a math skills bootcamp for college-to-university summer transition students to prepare 25 incoming students for undergraduate course requirements.

Quality Engineering Associate (Internship)

June 2019 – Aug. 2019

Honda of Canada Manufacturing, Vehicle Quality (Alliston, Ontario)

- Proposed a dynamic vehicle ride-height correction method to reduce the prevalence of rear tow misalignment on the non-contact alignment tester (re: RATA alignment errors on NCAT).
- Implemented an internal PHSR tracking protocol with enhanced report generation capabilities.
- Optimized department software tools used for evaluating weekly production data metrics by removing redundant calculations and automatically generating production reports.

Machine Vision Technician**Jan. 2014 – Sep. 2018**

Vista Solutions Inc. (Windsor, Ontario)

- Developed autonomous industrial processes, or updated existing manual processes to incorporate machine vision inspection systems and improve cycle time by as much as 50%.
- Established a standardized program specification for robot-guided material handlers used in picking and de-racking applications, reducing installation time requirements by 6 hours per robot.
- Spearheaded the development of an internal robot guidance training program for new employees and adapted the program for use on-site at customer facilities.

Project Engineer**May 2013 – Jan. 2014**

Esys Automation (Auburn Hills, Michigan)

- Developed and debugged preliminary smart conveyor control logic using RSLogix 5000 and FactoryTalk View Studio to reduce installation time on-site at customer facilities.
- Designed robot cell layouts, performing electrical load calculations and work envelope studies.
- Performed as-built design revisions to ensure accuracy of all drawings and service records .

Education**Master of Science, Mechanical Engineering****Sep. 2020 – Sep. 2022**

Lakehead University (Thunder Bay, Ontario)

**Bachelor of Engineering, Mechanical Engineering
Minor, Mathematics****Sep. 2016 – May 2020**

Lakehead University (Thunder Bay, Ontario)

Advanced Diploma, Electro-Mechanical Engineering Technology**Sep. 2010 – May 2013**

Humber College (Etobicoke, Ontario)

Volunteer Work**Canadian Blood Services****2007 – Current**

- Donor and leader in community engagement efforts

Engineering Student Society**2017 – 2020**

- Established "Industry Night", which has connected local engineering businesses with Lakehead University graduates annually since conceptualization in 2017
- Constructed a sponsorship funding package to connect with new industry partners in the Thunder Bay area, and expand potential scope of services offered to engineering students
- Created the open-access engineering class note reference database "Genno Notes" (<https://gennonotes.github.io/>) -- which is still frequently referenced by OPG associates!

Student Accessibility Services**2016 – 2020**

- Provided note taking accommodations for students with additional academic considerations

Credentials, Awards, and Honours**Engineering Intern (EIT)****2020**

- Completed the national professional practice exam (NPPE), and eligible for registration as a Professional Engineer (P. Eng.) with PEO after completion of engineering work experience

Iron Ring Ceremony Graduating Class Representative**2020**

- Selected based on consistent academic and leadership achievements

Abitibi-Bowater Student Award**2019**

- Awarded for outstanding academic achievement

PEO Foundation for Education Undergraduate Student Award**2018**

- Awarded for outstanding academic and leadership achievements

Certified Engineering Technologist (C.E.T.)**2015**

- Certified electrical engineering technologist