

SUMMARY OF QUALIFICATIONS

- Designing with SolidWorks, AutoCAD and GD&T; manufacturing with Mastercam
- Programming in C++; used control theory with IMUs, vision system to model non-ideal systems
- Managing projects: using Microsoft Office, creating BoMs and Gantt charts
- Using *nix systems, regex, MATLAB and Microsoft Windows

RELEVANT EXPERIENCE

Main Organizer & Co-Founder October 2017-Present
Robot in 3 Days Team Ontario Ontario

- Distributed comprehensive documentation of the final robot, the design and the strategy process, along with reflection on the initial Gantt chart and BoM
- Programmed, prototyped and built a competitive base robot to inspire high-school FIRST teams
- Recruited candidates after analysing their skillsets to create a competitive robotics team

Junior Manufacturing Engineer, Co-op April 2018-August 2018
Electrical Contacts Limited Hanover, ON

- Gathered data and created planning documents using Excel so that information is easily retrieved
- Consulted operators and led meetings with management to determine the best path forward
- Worked independently to discover process issues, then implemented solutions with colleagues
- Designed and manufactured parts and assemblies using vernier, SolidWorks and Mastercam

Member September 2017-February 2018
UW Robotics Team University of Waterloo

- Co-designed and co-programmed a winning robot to play tones based on a line's grayscale values
- Designed a robot drivetrain for traversing a saline environment in 3D space

Design & Strategy, and Electrical Lead 2013-2017
Kinetic Knights Robotics (FIRST Robotics Competition Team 781) Kincardine, ON

- Reduced robot mass to 80% of typical 120 lbs by optimizing layout with SolidWorks and DFM
- Worked with other leaders to debug Java, co-lead move to Git, mentor and develop strategies
- Used control theory with OpenCV, encoders and IMUs to control drivetrains and shooting systems
- Used Gantt chart and BoM to manage time, stay under budget and follow design plan

EDUCATION

Honours Mechatronics Engineering, Co-op (BASc) 2017-2022
University of Waterloo Waterloo, ON

CERTIFICATIONS & AWARDS

SHAD Fellow July 2017
Schulich Leader Nominee April 2017
Diplôme d'études en langue française (Niveau B2) May 2017