

Undergraduate
Mechanical Engineer

Website: yuan-dai.com 647-617-3935 daiyuan2001@gmail.com www.linkedin.com/in/yuandai

# SUMMARY OF QUALIFICATIONS

- Experienced with modelling and plotting in SolidWorks and AutoCAD
- Proficient in Java, Python, C++, HTML, Objective-C, introduced to SQL
- Skilled with Microsoft Word and Excel
- Familiar with **engineering drawings** and **GD&T**
- Experienced with soldering and machining, specifically mill and lathe

## **EXPERIENCE**

2019 Park Attendant /Ride Manager

Centreville Amusement Park

- Worked with Security, Health & Safety facilities to ensure smooth operation of the park, awarded rookie of the year
- Effectively operated park rides safely and efficiently
- Communicated with peers and patrons, created professional reports weekly

2015-2018 Lead Summer Camp Counsellor

Cybercamp Robotics Academy

- Supervised 40 campers ages 12 14
- Prepared 20 40 minute daily lessons on robot design logistics and ROBOTC
- Designed activities ranging from robotics competitions to outdoor games
- Provided professional weekly progress reports to parents highlighting achievements

#### **PROJECTS**

2019-present

## Midnight Sun Mechanical Sub-team

- Member of a solar car design team, dedicates 6-12 hours weekly
- Constructed bottom and side molds using MDF with various equipment
- Created car body with carbon fibre and honeycomb sandwich panels

2019 Personal Toy Design

- Designed and modelled a customizable music box in SolidWorks with 60+ parts
- Used 3D printing, laser cutting, and woodworking tools to finalize model, evaluated to be an excellent design by a Spin Master Agent

2015-2019 Toronto Science Fair

- Selected to the Toronto Science Fair 3 times due to outstanding projects
- Incorporated circuit design and various electronic parts to create an arm sleeve that charges phones using body heat, practiced profession writing and Excel

2018 Engineers Without Borders

- Led a team of 5 selected students to solve problems in the local community
- Contacted and pitched ideas to 5 politicians to install new stop sign, utilize new garbage can design, and improve green spaces.

**EDUCATION** 

2019-Present Candidate for BASc. Mechanical Engineering

University of Waterloo

### **INTERESTS**

- Team sports 3 years of AA volleyball and basketball, developed leadership and teamwork skills
- Chess 2000 ELO rating, 99<sup>th</sup> percentile on chess.com
- Programming developed iOS tweaks using Xcode and Theos as hobby
- Engineering Industries aerospace and automotive manufacturing in particular
- Renewable energy related fields