Education

University of Toronto Toronto Toronto

BACHELOR OF APPLIED SCIENCE, MECHANICAL ENGINEERING

Sep 2019 - Apr 2023 (exp)

COURSE DESIGN PROJECTS

- Design of an FDM 3D printer in MIE243 (Mechanical Engineering design)
- Design of Temperature Regulation System using Muse S in APS112 (Engineering Strategies and Practices II)
- Team leader for design of Accessible Ferry Ramp in APS111 (Engineering Strategies and Practices I)

Skills

Languages Fluent in English and Japanese

Programming Proficiency in Java and Python; experience in HTML and CSS **Computer Aided Design** Proficiency in SOLIDWORKS (CSWA certified), Fusion 360

Experiences ___

Robotics for Space Exploration

University of Toronto, Toronto, Ontario

JUNIOR MECHANICAL LEAD

Sep 2020 - Present

- · Design of carbon-fiber rocker bogie, increasing durability and decreasing weight
- · Recruitment, training, and organization of weekly meetings for the mechanical sub team
- · Oversee design and fabrication of drive mechanisms for a Mars rover, such as wheels, gearboxes, differential bar, and chassis
- Communication and outreach to external companies for sponsorship of parts and services

General Member Sep 2019 - Sep 2020

- · Redesign of battery bay for faster battery exchanges and sturdier mounting of the high-power circuit board
- · Fabrication and assembly of mechanical components, including the rocker bogie. chassis and gearboxes

FRC Robotics Team 6135: Arctos

Bloor Collegiate Institute, Toronto, Ontario

CO-CAPTAIN Sep 2017 - Jun 2019

- Oversaw all fundraising, sponsorship and outreach activities as Co-Captain in 2019 season
- Spearheaded redesign of robot chassis using dual-speed gearboxes
- Involved in competition "pit crew", managing all repairs and subsystem checks before matches
- · Nominated by team as Dean's List candidate for contributions to the team and FIRST community

GENERAL MEMBER Sep 2015 - Sep 2017

Work

Bulk Barn 2 Carlton St., Toronto, Ontario

CASHIER Jul 2020 - Present

- · Accurately identified and weighed bulk food products for entry into Point of Sale (POS) system for payment processing
- Maintained cleanliness and organization of product bins, counters, shelves and washrooms
- Refilled coffees, teas, spices and packaged goods
- Assembled online orders for curbside pickup

S.J. Lye Lab, Lunenfeld Tanenbaum Research Institute

60 Murray St., Toronto, Ontario

Summer student Jul - Aug 2019

- · Aided members with laboratory testing and data analysis for research in maternal/fetal health and prevention of preterm labor
- Conducted plasmid DNA extraction using QIAGEN MaxiPREP and MiniPREP kits
- Reorganized and updated the lab's inventory of chemicals and biological materials

University Settlement Recreation Center

23 Grange Rd., Toronto, Ontario Mar 2019, Jul - Aug 2018, Jul - Aug 2017

• Supervised 4-5 year old children in day to day activities, including swimming and off-site excursions

Organized crafts and activities

DAY CAMP STAFF

• Prepared snacks and distributed lunches

DECEMBER 3, 2020 ERIKA NARIMATSU · RÉSUMÉ