Erika Narimatsu

Skills

Mechanical Design

- **SOLIDWORKS**
- Fusion360
- **ANSYS**
- Fabrication and machining

Programming

- Java
- Python
- HTML & CSS
- MATLAB

Soft skills

- Project management
- Communication
- Decision making

Relevant Courses

Current

- Engineering Biology (CHE353)
- Fluid Dynamics 1 (MIE312)
- Kinematics and Dynamics of Machines (MIE301)
- Circuits with Applications to Mechanical Engineering Systems (MIE342)

Completed

- Mechanics of Solids 1 (MIE222)
- Material Science (MIE270)
- Engineering Analysis (MIE230)
- Thermodynamics (MIE210)

Projects

ANSYS Workshop

Curated and presented a workshop on the basics of finite element analysis and ANSYS for members of the Robotics for Space Exploration design team.

Ball valve assembly system

Designed an assembly system for a guarter turn ball valve in MIE221 (Manufacturing Engineering).

FDM Printer Design

Designed an FDM 3D printer for professional engineering prototypes in MIE243 (Mechanical Engineering Design).

See all projects

Education

University of Toronto

BACHELOR OF APPLIED SCIENCE

Sep 2019 - Apr 2023 (exp)

Major in Mechanical Engineering with specialization in mechatronics and bioengineering

Experience

BulkBarn

SUPERVISOR

Jun 2021 - Present

- Conducted end-of-day accounting and created financial reports for the store owner
- Oversaw operations within the store by preparing schedules, delegating tasks to staff, and updating store signage
- Ensured customer satisfaction by ensuring store hygiene and product qualify, processing refunds, and responding to customer complaints **CASHIER** Jul 2020 - Jun 2021

S.J. Lye Lab

RESEARCH INTERN

Jul 2019 - Aug 2019

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

Extracurriculars

Hardhat Cafe

OPERATIONS EXECUTIVE

Jul 2021 - Present

- Ensured appropriate sanitization/food safety measures are implemented within the store and re-arranged store layout to accommodate for COVID-19 protocols
- Monitored product sales by analyzing sales data
- Assisted managers in preparing invoices, placing orders, and making payments

Robotics for Space Exploration

MECHANICAL LEAD

JUNIOR MECHANICAL LEAD

Aug 2021 - Present Sep 2020 - Aug 2021

- Redesigned carbon-fiber rocker bogie to increase durability and decrease
- Conducted recruitment, training, and organization of weekly meetings for the mechanical sub team
- Oversaw design and fabrication of drive mechanisms for a Mars Rover (wheels, gearboxes, differential bar, and chassis)
- Communicated with external companies for sponsorships and donations GENERAL MEMBER Sep 2020 - Present
 - Redesigned the battery bay for faster battery exchanges and sturdier mounting of the high-power circuit board