Erika Narimatsu

Skills

Mechanical Design

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

Programming

- Java
- Python
- HTML & CSS

Soft skills

- Project management
- Communication
- Decision making

Relevant Courses

Current

- Engineering Biology (CHE353)
- Fluid Dynamics 1 (MIE312)
- Kinematics and Dynamics of Machines (MIE301)

Completed

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

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 a assembly system for a quarter 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

Hobbies

- Baking
- Piano and saxophone
- PC games
- 3D printing

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