

Jessica Mimi Du

+1 (628) 688-2338
jessica.mimi.d@gmail.com

EDUCATION

University of Waterloo

Bachelor of Applied Science Honors Mechanical Engineering (With Distinction- GPA 3.7), June 2022

Tokyo Institute of Technology

Exchange to the lab of Murayama and Nishikizawa, Sept 2019-Feb 2020

EXPERIENCE

Product Designer

Bumblebee Spaces
San Francisco, USA
SEPT 2021-DEC 2021

- Designed wire harnesses for ceiling-mounted automated robotic furniture
- Designed clevis assembly test fixture to test webbing stitches to withstand 70kN
- Ramped up PVT for production of 50 robots while overseeing 2 assemblers
- Rapid prototyped 3D printed parts optimized for injection molding

Manufacturing Engineer

Ecobee
Toronto, Canada
JAN 2021-APR 2021

- Designed preliminary packaging concepts using eco-friendly materials
- Spearheaded project to redesign PET transportation trays for reuse in multiple factories- reducing yearly packaging waste by 10,000 trays on a hero product
- Iteratively designed and 3D printed DVT assembly tool prototypes, created drawings for rapid-prototype manufacturer in SolidWorks using GD&T principles
- Created proof-of-concept vision system to prevent factory assembly failures
- Reprogrammed and troubleshooted defunct assembly press fixtures

Capex OPM

Apple Inc (Beats Division)
Cupertino, USA
MAY 2019-AUG 2019

- Managed Capex on three Beats programs, saving \$30,000+ with reuse and retrofit
- Travelled overseas to review product validation and manufacturing processes
- Created project management tools in Tableau, streamlining Capex calculations
- Presented proposals to Vice President and Director of Beats, obtained approval

Mechanical Designer

Tesla Toronto Automation ULC
Richmond Hill, Canada
SEPT 2018-DEC 2018

- Redesigned battery assembly line conveyors for overseas client in SolidWorks with 75+ new parts and drawings to allow space for forklift operation
- Managed the shipment of a battery assembly line, overseeing 3 employees- recovered \$20,000+ in lost parts, documented and shipped in record time
- Identified root cause and redesigned parts on battery line when errors occurred

Mechanical Coordinator

Plan Group
Vaughan, Canada
JAN 2018-APR 2018

- Drafted mechanical, electrical, and plumbing schematics in AutoCAD
- Designed and developed plans for fuel oil distribution pipelines, Variable Refrigerant Flow systems, Air Handling Units, and snowmelt systems
- Wrote technical report to bid on replacement of building cooling system
- Coded a VBA Excel tool to estimate BMS points for smart buildings

Project Manager

Tesla Toronto Automation ULC
Richmond Hill, Canada
MAY 2017-SEPTEMBER 2017

- Stream-lined dual inventory system, locating and minimizing lost parts
- Coordinated cross-functionally with department supervisors to guarantee timely delivery of orders while meeting high quality control standards
- Documented failed or damaged parts and determined corrective actions
- Communicated with suppliers and clients to fulfill and modify orders

SKILLS

SolidWorks/ Inventor	GD&T
Woodworking/ Machining	PDM
Additive Manufacturing	AutoCAD

LANGUAGES

English	NATIVE
French	FLUENT
Mandarin	FLUENT

INTERESTS

Making ceramics	Snowboarding
Building furniture	Making music
Learning languages	Painting