

# Kai-Xiang (Howard) Yen

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## Education

### University of Toronto St. George Campus

Toronto, ON

B.E. IN ENGINEERING SCIENCE, MAJOR IN MACHINE INTELLIGENCE

Sep 2019 - Apr 2020

- Relevant Courses: Classical Mechanics, Structures & Materials, Praxis I, Engineering Mathematics & Computation  
Computer Programming, Molecules & Materials, Fundamentals of Electric Circuits, Computer Algorithms & Data Structures.

### University of Toronto St. George Campus

Toronto, ON

B.A.SC. IN INDUSTRIAL ENGINEERING, MAJOR IN ARTIFICIAL INTELLIGENCE AND MACHINE

Sep 2020 - Apr 2024

- Relevant Courses: Modelling with Differential and Difference Equations, Engineering Economics and Accounting, Psychology For Engineers  
Statistics, Human Centred Systems Design, Operations Research I: Deterministic OR, Operations Research II: Stochastic OR.

## Experience

### ASML

Taoyuan City, Taiwan

INFORMATION TECHNOLOGY SUMMER INTERN

June 2020 - September 2020

- Assist service desk engineers in handling request and trouble shooting issue
- Meeting with staff to provide one-on-one technical assistance as needed or requested.
- Lend IT support in areas such as cybersecurity, programming, analytics, and data center management

## Projects

### PRAXIS I BETA RELEASE: IMPROVING STUDENT EXPERIENCE ON ST. GEORGE STREET

- As a team lead, led a group of four engineering students in determining a solution to the traffic problem on St. George Street in terms of safety, usability, and accessibility.
- Assisted with CADing of the conceptual design: Sidewalk Barriers.

### PRAXIS II SHOWCASE: IMPROVE THE LIVED EXPERIENCE FOR THE DEALER AT 401 DIXIE NISSAN

- Implement a design that can help the dealer at 401 Dixie Nissan to minimize time locating a car.
- As a project manager, managed and planned the team's work progress and responsible for team communication as well.
- The whole showcase requires us to refine the current conceptual designs into ever-more detailed engineering design specifications.  
This process of refinement requires that the engineering designer continues to make decisions in a structured, rigorous, engineering way.

### DATA MODELLING: IMPROVE AN EXISTING BREWERY'S PRODUCTION PROCESS

- Coded a data model to demonstrate brewery production process in Python.
- A group of three engineering students were tasked to improve the existing model by introducing randomness and optimize the production process.

## Skills

**Programming** Python, Java, MATLAB, C++, R-Language

**CAD** AutoCAD, Google sketch-up

**Tools** LaTeX, Microsoft Office, Final Cut Pro

**Languages** English, Mandarin

## Awards

### UNIVERSITY OF WATERLOO: CANADIAN SENIOR MATHEMATICS CONTEST

- School Champion 2018-2019
- Certificate of Distinction 2017-2018

### ACADÉMIE STE CÉCILE INTERNATIONAL SCHOOL ATHLETICS: BOYS BASKETBALL

- Spirit Award 2018-2019
- Coach's Award 2017-2018