

# YAOWEN MEI

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🌐 [ywmei.ca](http://ywmei.ca)

🐙 [github.com/y5mei](https://github.com/y5mei)

## Education

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### University of Guelph

May. 2021 – May. 2023

*Master of Engineering in Computer Engineering*

*Guelph, ON*

- **Coursework:** Asset Pricing (R), Introduction to Machine Learning (Python), Soft Computing (MatLab), Software Design and Architecture (Java), Cloud Computing (AWS)

### University of Waterloo

Jul. 2014 – Sept. 2016

*Master of Science in Physics*

*Waterloo, ON*

### University of Waterloo and Dalian University of Technology (China)

Sept. 2010 – April. 2016

*Bachelor of Science in Physics & Bachelor of Engineering in Electronics (Double Degree)*

*Waterloo, ON*

## Technical Skills

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**Languages :** Python, Java, R, SQL, Windows Batch

**Libraries:** Pandas, Numpy, Matplotlib, Tensorflow, Selenium, Boto3, Swing

**Tools:** AWS, Docker, Version Control (Git), Builds Control (Maven/Gradle), Android Studio, MySQL, MongoDB, Firebase

**Certification:** Intermediate Java Programming Certificate from Conestoga College;

Certified Quality Engineer from American Society of Quality;

Certified LabView Associate Developer;

## Projects

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### UWaterloo Campus Tour App [\(Link\)](#) | *Java, Android Studio, Google Firebase*

August 2021

- Developed an android map application with the Google Map API and Firebase database for students to share their unique stories related to different spots/buildings on campus.
- Implemented with various software architectural styles, such as repository, pip & filter and implicit invocation style to enhance the scalability and re-usability of the code.
- Applied decorator and strategy design patterns to decrease coupling and increase cohesion between objects.
- Awarded the “best final demo” prize of the Summer 2021 CS646 class at UWaterloo

### Mobile Machine Learning App [\(Link\)](#) | *Java, Android Studio, Tensorflow Lite*

August 2021

- Created a mobile phone app can identify different analytical chemistry equipment with the back camera, and provide operating instructions, historical data, and calibration status to the responsible chemistry Lab technician.
- Trained a Tensorflow Lite machine learning model with 100 pictures for object identification.
- Utilized the Firebase Realtime Database (JSON) for data storage.
- Elected as the best mobile app of the Summer 2021 ENGG6400 class at U of Guelph

### Data Processing Application [\(Link\)](#) | *Python, Pandas, Batch Scripts*

March 2021

- Designed a data processing software that collects, process, and evaluate the final products’ inspection result for a gear manufacturing plant.
- Used Pandas and Numpy for data processing and report generating.
- Saved the company more than \$15,000 yearly from purchasing commercial software license.

## Experience

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### Stackpole International Powder Metal Ltd.

April 2019 – May 2021

*Process Quality Specialist*

*Ancaster, ON*

- Wrote Coordinate Measurement Machine (CMM) programs to match the customer’s specification.
- Maintained a LAN for 8 gauges, trouble shooting for packet loss and communication failure.
- Wrote Windows Batch scripts to monitor inspection status and archive inspection results.

### Linamar Eston Manufacturing

Oct 2016 – Feb 2019

*Quality Technician/CMM Programmer*

*Guelph, ON*

- Build Windows PowerShell Scripts to automatically segregate and print inspection reports.
- Wrote programs for Computer Numerical Control, Allen Bradley Robots, CMM and automatic gauge.
- Awarded to be the Best Employee of the Month on Aug 2017