

timgu.me

**Skills \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **Programming**: C, C++, Python, Qt5 | **Web**: Html5, CSS, JavaScript, SQL Server |
| **Mobile**: Java, Android Studio | **Data Science**: TensorFlow, MatLab, R, VBA |
| **Hardware**: VHDL, Verilog |  |

TIM GU

github.com/timchenggu123

www.linkedin.com/in/Tim-ChengGu

c28gu@uwaterloo.ca

**The University of Waterloo Computer Engineering 2022**

**Experience \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Ambient Air Data Analyst** *Environment and Climate Change Canada*

[Apr 2018 – Sep 2018]  
Developed custom data analytics software using a combination of R, MatLab, SQL and VBA. Analyzed and reported on data between 1997 to 2017. Migrated data from MS Excel and MS Access database to the NAPS SQL database. Assisted in redesigning the NAPS Web Portal to support real-time data updates and interaction.

**Agile Web Project Coordinator**

*QingPath Inc.*

[Jan 2017 – Apr 2017]  
Agile Web Development for community-centric small businesses with Mobile-First development concepts in mind. Worked on projects built using Bootstrap framework with html5, CSS3 and JavaScript. Performed cross-browser QA testing and other tasks.

**Engineering Student**

*Township of South Frontenac.*

[Sept 2017 – Dec 2017]

Created A custom traffic managing and tracking software.

**Projects \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SaveMi**

*Android & Google Cloud API*

[Jan 2019 – Present]

**Winner of 2019 Waterloo EngHack Best Use of Google Cloud Platform.** A machine vision empowered personal heath monitoring app for people with severe allergies. Identify potential allergy sources from photos taken, send out warnings and store the record in the cloud.

**Flow AI**

*VB & JavaScript*

[Spet 2019 – Present]

**Winner of 2019 Hack the North** NLP empowered application capable of generate presentation from speech and complete other tasks such as web scraping and shopping.

**OrangeScript**

*C++*

[Jun 2019 – Present]

An imperative, dynamically typed, interpreting programming language. OrangeScript supports first class functions and automatic garbage collection.

**FlashMemorizeDroid**

*Android Studio & Java*

[Oct 2018 – Present]

An Android application capable of taking lines in a text document and generate a deck of flashcards from it. The program offers various card-shuffling methods and tracks user record.

**Extracuricular\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**UW SAE Autonomous Vehicle Team**

*Core Member. Data Processing*

Responsible for high level image-sensor data stream fusion. Languages used primarily consist of C++ and Python.

**UW Concrete Team**

*Software Captain*

Created and maintained custom software used in design process. Examples include Concrete Neural Network. Also maintains website.