TIK CHUN TONG

CONTACT INFORMATION

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Email: tikchun.tong@mail.utoronto.ca

Github: https://github.com/TikChun

Education

- **University of Toronto** *(Currently in Year Three)*
  From 2020 to 2021 (Year One)
  Engineering Science
  From 2021 to 2025 (Year Two ~ Year Four, include one year of practical experience)
  Computer Engineering
  PEY Co-op (Detailed Job requirement is explained at the end)
- **Core Courses:**
  - **Computer Engineering Related Courses:**

Course	Grade
ESC180 Intro to Computer Programing	Grade: A-
ESC190 Computer Algorithm & Data Structure	Grade: B+
ECE244 Programming Fundamentals	Grade: A
ECE241 Digital System (Verilog)	Grade: B
ECE243 Computer Organization (ARM Assembly)	Grade: A-
ECE297 Software Communication & Design	Grade: B
ECE345 Algorithm and Data Structure	Grade: A
APS360 Applied Fundamentals of Deep Learning	Grade: B
ECE361 Computer Networks (in progress)	
ECE344 Operating System (in progress)	

  - **Others**
    - ESC101&102 Praxis 1&2 (The procedure of engineering design, teamwork)

Skills

- Programming: Python, C, C++, MATLAB, Verilog, ARM Assembly, Java, R, html,css,Pytorch
- Electrical Engineering: Typhone hill, Modelsim, Multisim.
- CAD/Design: Sharp 3D, TCAD simulation by Sentaurus

Experience

2021 January – 2021 April

- Go through the standard procedure of industrial engineering design
- Successfully designed a tool for people with visual impairment to identify clothes at home without other people's assistance.
- Simple mobile app demos are provided during the final presentation. (by Adobe XD)

2022 January – 2022 April (ECE297)

- Built a Geographic Information System software capable of searching the geographical location, planning routes and navigation.
- It's a C++ project based on Linux system, teamwork, and version control using Git.
- Numerous data structures were used to achieve better lower loading time.
- Path search is first done by Dijkstra, then further improved to A*.

2022 April (ECE243)

- Built CPU using Verilog, capable of using four registers to accomplish multiple Assembly operations. Including "mv,mvt,add,subs,ld,st,push,pop,bl,cmp,lsl,lsr,ars, and ror"
- Use ARM Assembly to write a "Calculator" program
- Functions of the CPU are tested using "Calculator" program.

2022 September – 2022 December (APS360)

- Team-work deep learning neural network development based on PyTorch.
- Topic: Classify YouTube Videos by Thumbnail
- Architecture: pre-trained GoogleNet & Fully Connected Classifier
- Platiform of collaboration: Github
- Result: Test accuracy of 77.6%, precision of 77.69% and recall of 77.54 %.
- Some exposure to UI design using Qt in Python

2023 Januarry – Present (ECE361)

- Computer Networks lab projects
- Stage one: File Transfer
  - Based on UDP, implemented acknowledgements
  - Flow control
  - DNS
- Stage two: Text Conferencing (Soon.)
  - Group Chat
  - Multi-users
  - Log-in feature

    More features will be implemented soon

Extracurriculars

Volunteer in "Diving & Marine Conservation Project in Thailand"   July 2019
- Participated in Coral Watch program to help preserve corals.
- Participated in actions that help preserve mangrove forests.
- Deepen the understanding of the least developed region in Thailand.

Volunteer Teaching in Under the Same Sky program in mainland China   July 2018
- This activity took place in Shao guan, Guangdong. One of the least developed regions of China.
- Teach local elementary students the most basic knowledge about hydroponics.
- Deepen the understanding of people's lives in the less developed region.

Languages

- **English**
- **Chinese** (Mandarin, Cantonese)

Other Certifications & Training

- **Scuba Diving "Open Water"**
  Issued by PSAI
  Date of Completion: 2017 Summer
  Being certified as a professional OW Scuba Diver.

- **Scuba Diving "Advanced Open Water"**
  Issued by PSAI
  Date of Completion: 10/10/2017
  Being certified as a professional AOW Scuba Diver.

Result: "Qualified to conduct dives in Open Water in conditions similar to training with equality or greater qualified divers to a Maximum Depths of: 90fsw/27msw"

Job Requirement: (Offical letter attached at the end)

1. It must be with **full time**, **paid work**, of an appropriate duration at **a single employer.**

2. **12-16-month work terms:** must be 12-16 months in duration. They must begin between May and September following third year and must end no later than the first week of September of the following calendar year so students may return to school for the fall term of their final year of studies.

REGISTRATION HISTORY
2020 Fall - 2023 Winter : Faculty of Applied Science & Engineering

Faculty of Applied Science & Engineering

In Progress - 2020 Fall - PEY Co-op Program

2020 FALL - BASC IN ENGINEERING SCIENCE - DIVISION OF ENGINEERING SCIENCE
PEY Co-op Program
SESSIONAL GPA: **2.45**   CUMULATIVE GPA: **2.45**
SESSIONAL PERS: **69.2**
STATUS: **PASS**

CRS CODE	TITLE	WGT	MRK	GRD	CRS AVG
CIV102H1	STRUCT. & MATERIALS	0.50	72	B-	B+
ESC101H1	PRAXIS I	0.50	68	C+	B
ESC103H1	ENG. MATHEMATICS & COMPUTATION	0.50	62	C-	B+
ESC180H1	INTRO TO COMPUTER PROGRAMMING	0.50	80	A-	B+
ESC194H1	CALCULUS I	0.50	66	C	B
PHY180H1	CLASSICAL MECHANICS	0.50	67	C+	B+

May proceed

2021 WINTER - BASC IN ENGINEERING SCIENCE - DIVISION OF ENGINEERING SCIENCE
PEY Co-op Program
SESSIONAL GPA: **2.65**   ANNUAL GPA: **2.55**   CUMULATIVE GPA: **2.55**
SESSIONAL PERS: **70.5**
STATUS: **PASS**

CRS CODE	TITLE	WGT	MRK	GRD	CRS AVG
ECE159H1	FUNDAMENTALS OF ELEC. CIRCUITS	0.50	64	C	B
ESC102H1	PRAXIS II	0.50	74	B	B+
ESC190H1	COMP. ALGOR. & DATA STRUCTURES	0.50	77	B+	B
ESC195H1	CALCULUS II	0.50	63	C	B
MAT185H1	LINEAR ALGEBRA	0.50	68	C+	B
MSE160H1	MOLECULES AND MATERIALS	0.50	77	B+	A-

May proceed

2021 FALL - BASC - COMPUTER ENGINEERING - EDWARD S. ROGERS SR. DEPT. OF ELECTRICAL & COMPUTER ENGIN.
PEY Co-op Program
SESSIONAL GPA: **3.06**   CUMULATIVE GPA: **2.70**
SESSIONAL PERS: **76.2**
STATUS: **PASS**

CRS CODE	TITLE	WGT	MRK	GRD	CRS AVG
ECE201H1	SEM. ELEC.& COMP. ENGINEERING	0.15		CR	*
ECE212H1	CIRCUIT ANALYSIS	0.50	84	A-	B
ECE241H1	DIGITAL SYSTEMS	0.50	75	B	B-
ECE244H1	PROGRAMMING FUNDAMENTALS	0.50	86	A	B-
MAT290H1	ADVANCED ENG. MATHEMATICS	0.50	68	C+	B
MAT291H1	CALCULUS III	0.50	68	C+	B-

May proceed

2022 WINTER - BASC - COMPUTER ENGINEERING - EDWARD S. ROGERS SR. DEPT. OF ELECTRICAL & COMPUTER ENGIN.
PEY Co-op Program

SESSIONAL GPA: **3.00**   ANNUAL GPA: **3.03**   CUMULATIVE GPA: **2.77**
SESSIONAL PERS: **74.0**
STATUS: **PASS**

CRS CODE	TITLE	WGT	MRK	GRD	CRS AVG
ECE216H1	SIGNALS AND SYSTEMS	0.50	62	C-	C+
ECE221H1	ELE.&MAGNET FIELDS 2	0.50	77	B+	B-
ECE231H1	INTRO. ELECTRONICS	0.50	77	B+	C+
ECE243H1	COMPUTER ORGANIZATION	0.50	81	A-	B-
ECE297H1	SOFTWARE COMMUNICATION&DESIGN	0.50	73	B	B+

May proceed

2022 FALL - BASC - COMPUTER ENGINEERING - EDWARD S. ROGERS SR. DEPT. OF ELECTRICAL & COMPUTER ENGIN.
PEY Co-op Program
SESSIONAL GPA: **3.28**   CUMULATIVE GPA: **2.86**
SESSIONAL PERS: **78.0**
STATUS: **PASS**

CRS CODE	TITLE	WGT	MRK	GRD	CRS AVG
APS360H1	APP. FUND. OF DEEP LEARNING	0.50	73	B	B-
CIV220H1	URBAN ENGINEERING ECOLOGY	0.50	81	A-	B
ECE302H1	PROBABILITY & APPLICATIONS	0.50	90	A+	B-
ECE335H1	INTRO. TO ELECTRONIC DEVICES	0.50	61	C-	B-
ECE345H1	ALGORITHMS & DATA STRUCTURES	0.50	85	A	B+

May proceed

2023 WINTER - BASC - COMPUTER ENGINEERING - EDWARD S. ROGERS SR. DEPT. OF ELECTRICAL & COMPUTER ENGIN.
PEY Co-op Program

CRS CODE	TITLE	WGT	MRK	GRD	CRS AVG
CIV300H1	TERRESTRIAL ENERGY SYSTEMS	0.50		IPR	
ECE313H1	ENERGY SYS. & DIST. GENERATION	0.50		IPR	
ECE344H1	OPERATING SYSTEMS	0.50		IPR	
ECE361H1	COMPUTER NETWORKS I	0.50		IPR	
ECE472H1	ENG.ECO.ANA.& ENTRE.	0.50		IPR	

Angelique Saweczko
University Registrar

----- **End of Transcript** -----

UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING

September 6, 2022

To Whom It May Concern:

RE: Tik Chun Tong (1006700919)

The Office of the Registrar of the Faculty of Applied Science & Engineering certifies the following:

Tik Chun Tong has registered in the Faculty's Professional Experience Year Co - op program(PEY Co - op).

As a condition of graduation, students in the BASc degree program are required to obtain a minimum of 600 hours of practical experience through industry employment. Their participation in the PEY Co-op satisfies the Faculty's practical experience graduation requirement. Participation in PEY Co-op extends the four-year program by one year.

Best regards,

Don MacMillan
Faculty Registrar
DLI Number O19332746152