# Philippe Vo

#### Education

**2017-2021 Bsc, Computer Engineering**; Concordia University (Montreal, QC)

Member of the Institute for Co-operative Education

GPA 3.38

**2015-2016 BSc, Mechanical Engineering**; Concordia University (Montreal, QC)

65.25 credits

**2015 DEC, Applied Sciences**; Champlain College (St-Lambert, QC)

## Experience

#### **Research Assistant:**

Concordia University (Montreal, QC)

September 2016-2017

- Worked in a research laboratory specialized in Digital Microfluidics (liquid handling technology).
- Created three software systems, a GUI (Graphical User Interface) to control a Digital Microfluidics automation system, an automatic absorbance reader (AIMS) and an image-based feedback system for Digital Microfluidics.
- Collaborated with other lab members coming from other fields such as Biology, Electrical and Material Engineering.
- Published my research project on my image-based feedback system in the "Lab on a Chip" journal.
- Link to my research paper abstract
- Technical Skills used: GUI programming, embedded systems programming, computer vision.
- Skills acquired: research, teamwork, time management, communication, planning.

#### **BusBoy**

Etoile DIX30 (Brossard, QC)

September 2014 - October 2014

- Worked closely alongside a group of barmen to manage 4 small bars inside a comedy theatre capable of serving about 200 people.
- The biggest task confined to me was the preparation of all the liquors and beers of the 4 bars given a short time lapse just before showtime.
- Other tasks consisted of cleaning all the drink glasses, maintaining inventory of all the liquors and beers and assisting the barmen during peak time such as intermissions.
- Skills acquired: teamwork, time management, communication, planning.

## Projects

#### Design of a Graphical user Interface for Digital Microfluidics (Academic)

Concordia University (Montreal, QC)

- Objective: To build a Desktop application to allow easy manipulation of a Digital Microfluidics automation system using Matlab. (ie. moving droplets, reading sensors, ...)
  - Learned how to operate a micro controller (Arduino).
  - Learned about programming Graphical User Interfaces and embedded systems.
  - Presently being used in the Shih lab for their Digital Microfluidics automation systems.
- · Skills acquired: research, teamwork, problem analysis
- Technical skills: basic electronics, micro controllers (Arduino), Matlab, GUI programming
- link for more information

#### Design of an Image-based Feedback System for Digital Microfluidics (Academic)

Concordia University (Montreal, QC)

- Objective: To use a camera to track and move droplets on a Digital Microfluidics chip.
- Created an algorithm to track and move droplets by implementing computer vision.
- Published a research paper regarding this project in the "Lab on a Chip" journal.
- Chosen to go to the uTAS Conference to present this project and was nominated for best poster presenter.
- Skills acquired: research, problem analysis, teamwork
- · Technical skills: Matlab, computer vision
- link to my research paper abstract

### Awards and Disctinctions

#### **Employers' Choice Award**

May 2017, Co-op Institute at Concordia University

• Co-op awards committee reviewed all nominations from their employer contacts and I was the recipient for this award in 2017. Nominated by my employer Steve Shih from Concordia University.

#### **USRA Scholarship**

Jan 2017, Natural Sciences and Engineering Research Council of Canada

 Undergraduate Student Research Award is given by the Natural Sciences and Engineering Research Council of Canada based on candidates academic record and research aptitudes.

# Merit Scholarship Program in Information Sciences, Computer Engineering and Construction of Computers, and Electrical, Electronic and Communications Engineering

Jun 2021, Government of Quebec

#### **Concordia Entrance Scholarship**

Dec 2016, Concordia University

A scholarship given to entering students at Concordia University which have been able to distinguish themselves academically.

# Extra Section

- Experience Abroad: Vietnam United-States Switzerland Hong Kong Thailand Morocco France
- Sports: Ski Tennis Badminton (Multiple medals won throughout 2008 to 2012)
- Passions: Robotics Online Gaming Piano (8 years)

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