

# Long Pham

## Graduate Software Engineer



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## About me

I am a recently graduated at Western University studying a Master's in Engineering Science doing research on convolutional neural networks. In my free time, I love to play with my dog, go on backpacking trips, love to learn new technology and love playing video games.

## Skills

C



Java



C++



Javascript



Python



## Achievements

2018 NSERC Grant

2017 Tespa Overwatch Top-10

2017 OW Collegiate League Top-8

## Attributes

Leader

Excellent Communication Skills

Problem Solver

Motivated to Learn

Dependent

Friendly

## Education

- since 2019 Master's of Engineering Science Western University  
Software Engineering: Initialization of CNNs using Gabor Filters
- 2012-2016 Bachelor's of Engineering Science Western University  
Majored in Software Engineering

## Publications

- 2019 Gabor Filter Initialization and Parameterization Strategies in Convolutional Neural Networks

## Work Experience

- since 2019 Graduate Teaching Assistant Western University  
Lead instructor for multiple courses including (1) microcontrollers, (2) software design, and (3) operating systems. Within these courses, I provided office hours, guidance, and organization between labs for over 500 cumulative students and fellow TAs.
- 2016 Software Instructor for Elementary Students Western University  
Instructed and created a simple HTML, JavaScript and CSS summer course for 25 elementary students in the summer using the Phaser.io

## Projects

### Gabor Filter Initialized Convolutional Neural Network Classifier

Thesis work that focused on the implementation of the Gabor filter used within a 7-layer convolutional neural network to classify 4 datasets consisting of almost 200,000 images in total. This network trained faster than other networks, but resulted in a slightly lower accuracy in comparison to other networks.

### DE-10 Development Board Wrist Watch

Created a simple watch using the DE-10 development board programmed to use an ARM processor. The watch was able to compute time in milliseconds, seconds, minutes, and hours. The clock featured basic stop, reset, and lap capabilities. This was used for a lab for over 300 3rd year engineering students to practice assembly language as well as C.

### Phasio.io 2-D Meteor Shooter Sandbox [↗](#)

Created a simple shooter using PhaserJS. Created simple AWSD controls using the mouse pointer to aim and shoot with. Extras such as high scores, lives, and weapon boosts were implemented as features. This game was created with JavaScript and was later used as a curriculum for 25 Grade 8 students interested in coding.

### Personal Website, [longpham.ca](#) [↗](#)

Using HTML, JavaScript, and CSS and other tools such as Foundation and ParallaxJS to spruce up the website. The website is used to display my work and leadership experiences, prior projects, interests, and achievements.

## Leadership Experiences

- 2012-2019 President of Western's Outdoors Club  
Long-term member of the Western Outdoors Club. Joined as a general member and quickly became part of the executives and helped organize and ran camping, backpacking, and canoe trips within Ontario, Canada for over 250 members. Maintained over \$10,000 worth of camping equipment.
- 2016-2019 Co-Captain of the Western's Collegiate Overwatch Team  
Main player on Western's Overwatch team for 3 years. Played in national tournaments such as TESPA and Ontario Collegiate League.