

# FUYUAN LYU

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silentspring2.github.io

## SUMMARY

I'm currently a Ph.D. student at McGill University. I am fortunate to be advised by Prof Jin Guo and Prof Xue Liu.

Prior to joining McGill, I got my bachelor's degree of Computer Science and Zhiyuan Honour Degree of Engineering from Shanghai Jiao Tong University(SJTU). I was advised by Prof Li Jiang and Prof Xiaokang Yang.

My research interest lies in the intersection between Machine Learning, Software Engineering and Internet of Things.

## EDUCATION

- PhD, Computer Science, McGill University, 2024(exp)
- BEng, Computer Science, Shanghai Jiao Tong University, 2019
- Zhiyuan Honor Degree for BEng, Shanghai Jiao Tong University, 2019

## PUBLICATIONS

**Fuyuan Lyu**, Shien Zhu, Weichen Liu, "Cross-filter compression for CNN inference acceleration", ArXiv preprint

Ke Li, Junzheng Wu, Huanlai Xing, **Fuyuan Lyu**, Pingzhi Fan and Chao Zhang, Mobility-Aware Online Content Caching for Vehicular Networks based on Deep Reinforcement Learning, submitted to IEEE Internet of Things Journal.

## RESEARCH EXPERIENCE

### McGill University

Research Assistant

Sept 2019 to present

Advisor: [Prof. Jin Guo](#) & [Prof. Xue Liu](#)

- Proposed to study the transferability of pruned model
- Proposed to design hardware-aware pruning methods

### Shanghai Jiao Tong University

Research Assistant

Feb 2019 to Aug 2019

Advisor: [Prof. Li Jiang](#)

- Built an light-weight end-to-end solution that support pruned neural network on edge devices

### Nanyang Technological University

Research Assistant

Aug 2018 to Feb 2019

Advisor: [Prof. Weichen Liu](#)

- Explored CNN spatial-adjunct layer property and proposed cross-filter acceleration method.

### Shanghai Jiao Tong University

Research Assistant

Jun 2017 to Feb 2018

Advisor: [Prof. Xiaokang Yang](#)

- Explored the possibility of more realistic cloth transfer by generating and transferring structure in 3D dimension.
- Designed a specific generative adversarial network to animate cartoon figures.

## TEACHING AND MENTORING EXPERIENCE

- 2020 Winter - COMP303 Teaching Assistant
- Reviewer of *Transaction on Service Computing*

## AWARDS

- Wolfe Fellowship in Sci & Tech, 2019-2022
- Grad Excellence Award of McGill University, 2019-2022
- Zhiyuan Honor Degree of Engineering of Shanghai Jiao Tong University(1%), 2019
- Zhiyuan Oversea Research Scholarship (1st class) of Shanghai Jiao Tong University, 2019
- Zhiyuan Outstanding Student Scholarship of Shanghai Jiao Tong University(5%), 2019
- Microsoft Intelligence Award , awarded to 4/438 participants in the 1st HACKxFDU Hackathon, 2016.

## SKILLS

**Software** Python, C++, Java

**Languages** English: professional proficiency. Mandarin: native.