

FUYUAN LYU

845 Sherbrooke St W, Montreal, Quebec

fuyuan.lyu@mail.mcgill.com

fuyuanlyu.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 utilizing Recommendation System and Graph Neural Network in the Software Engineering domain.

EDUCATION

- PhD, Computer Science, McGill University, 2019-2024(exp.)
- BEng, Computer Science, Shanghai Jiao Tong University, 2015-2019
- Zhiyuan Honor Degree for BEng, Shanghai Jiao Tong University, 2015-2019

PUBLICATIONS

Fuyuan Lyu, Xing Tang*, Huifeng Guo, Ruiming Tang, Xiuqiang He, Rui Zhang, Xue Liu, "Memorize, Factorize, or be Naïve: Learning Optimal Feature Interaction Methods for CTR Prediction", *submitted to ICDE 2022*

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

RESEARCH EXPERIENCE

Huawei Noah's Ark Lab

Research Intern

March 2021 to August 2021

Advisor: [Dr. Xing Tang](#)

- Studied feature interaction modelling in CTR Prediction

McGill University

Research Assistant

Sept 2019 to present

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

- Studied the transferability of pruned model and design hardware-aware pruning methods
- Utilized Recommendation and Graph Neural Network into Software Engineering domain

Shanghai Jiao Tong University

Research Assistant

Feb 2019 to Aug 2019

Advisor: [Prof. Li Jiang](#)

- Built a light-weight end-to-end solution that supports 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.