# Zhaocheng Zhu

6666 St Urbain St, Montréal, QC H2S 3H1, Canada

(+1)514-994-9516 ♦ https://kiddozhu.github.io ♦ zhaocheng.zhu@umontreal.ca

#### **EDUCATION**

Mila - Québec AI Institute / Université de Montréal, Montréal, Canada Sep. 2018 - Present Ph.D. student in Computer Science

· Graph Representation learning, Machine Learning Systems, Knowledge Graphs Advisor: Jian Tang

#### Peking University, Beijing, China

Sep. 2014 - July 2018

B.S. in Computer Science (with honors)

- · Natural Language Processing, Unsupervised Representation Learning, Word Semantics Advisor: Junfeng Hu
- · Computer Vision, Object Detection

Thesis Advisor: Yizhou Wang, Jifeng Dai (Microsoft Research Asia)

#### **INTERNSHIP**

#### Microsoft Research Asia, Beijing, China

Sep. 2018 - May 2019

- · Video object detection with optical flow and temporal context
- · Reproduction of Mask R-CNN for keypoint detection
- · Towards accurate localization in object detection

Mentor: Jifeng Dai

# Carnegie Mellon University, Pittsburgh, United States

July 2017 - Sep. 2017

· Stacked local linear explanations for deep neural networks

Advisor: Pradeep Ravikumar

#### Mitsubishi Information Technology R&D Center, Kamakura, Japan

July 2016 - Aug. 2016

- · Dialog State Tracking Challenge 5
- · Chinese language understanding for navigation systems

Mentor: Yusuke Koji

#### **PUBLICATIONS**

KEPLER: A Unified Model for Knowledge Embedding and Pre-trained Language Representation Xiaozhi Wang, Tianyu Gao, Zhaocheng Zhu, Zhiyuan Liu, Juanzi Li, Jian Tang. arXiv preprint arXiv:1911.06136, 2019.

# Self-Adaptive Network Pruning

Jinting Chen, **Zhaocheng Zhu**, Cheng Li, Yuming Zhao. In *International Conference on Neural Information Processing*, 2019. (Best Student Paper Finalist)

GraphVite: A High-Performance CPU-GPU Hybrid System for Node Embedding Zhaocheng Zhu, Shizhen Xu, Meng Qu and Jian Tang. In *The World Wide Web Conference*, pp. 2494-2504, 2019.

Saliency Supervision: An Intuitive and Effective Approach for Pain Intensity Regression Conghui Li, Zhaocheng Zhu and Yuming Zhao. In *International Conference on Neural Information Processing*, pp. 455-464, 2018.

# Context Aware Document Embedding

**Zhaocheng Zhu** and Junfeng Hu. arXiv preprint arXiv:1707.01521, 2017.

#### Dialog state tracking with attention-based sequence-to-sequence learning

Takaaki Hori, Hai Wang, Chiori Hori, Shinji Watanabe, Bret Harsham, Jonathan Le Roux, John R Hershey, Yusuke Koji, Yi Jing, **Zhaocheng Zhu** and Takeyuki Aikawa. In *IEEE Spoken Language Technology Workshop (SLT)*, pp. 552-558, 2016. (Runner up at Dialog State Tracking Challenge 5)

#### SELECTED PROJECTS

# GraphVite: A general and high-performance graph embedding system for various applications (with GraphVite team)

General and high-performance graph embedding system. Support 3 applications, 9 models and more than 40 baseline benchmarks. Over 500 stars and 500 downloads.

https://graphvite.io https://github.com/DeepGraphLearning/graphvite

# Literature of Deep Learning for Graphs (with Meng Qu and Weiping Song)

Comprehensive paper list of deep learning for graphs. Over 2,200 stars.

https://github.com/DeepGraphLearning/LiteratureDL4Graph

# Aleo: A toolkit for Mahjong AI (with Fangyin Wei)

Winner of 2018 Game AI course at Peking University, with a win rate of 46.8% in the 4-player Mahjong. https://github.com/KiddoZhu/Aleo

#### Find It! (with Jun Gao)

Efficient parallel implementation of dynamic dictionary matching.

https://github.com/KiddoZhu/FindIt

#### HONORS AND AWARDS

Tuition Fee Exemption Scholarships, Université de Montréal	2019 - 2021
Outstanding Graduate Student, Peking University	2018
Outstanding Research Award, Peking University	2016
Kwang-Hua Scholarship, Peking University	2016
Honorable Mention, Mathematical Contest in Modeling (MCM)	2016
Merit Student, Peking University	2015
Tung OCCL Scholarship, Peking University	2015
Honorable Mention, Mathematical Contest in Modeling (MCM)	2015
Group Champion, Peking University Debate Competition for Freshman	2014

# **SERVICE**

Reviewer, GRL Workshop, NeurIPS 2019

League branch secretary, Society of Photography, Peking University

Leader of story portrait group, Society of Photography, Peking University

Member of organizers & news team, HackPKU, Peking University

Sep. 2017 - June 2018

Apr. 2015 - Aug. 2017

Apr. 2016

#### **SKILLS**

# **Programming Languages:**

· Proficient: C/C++, Python, Pascal/Object Pascal

· Capable: MATLAB, SQL, Bash, Assembly, HTML/CSS

Frameworks: CUDA, PyTorch, MXNet, Keras, TensorFlow Toolchains: Git, LATEX, GDB, CMake, Conda, Photoshop

Languages: Mandarin Chinese(native), English(proficient), French(beginner)