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, Knowledge Graphs, Drug Discovery, Machine Learning Systems
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. In *Transactions of the Association for Computational Linguistics*, 2020.

GraphAF: A Flow-based Autoregressive Model for Molecular Graph Generation Chence Shi, Minkai Xu, **Zhaocheng Zhu**, Weinan Zhang, Ming Zhang, Jian Tang. In *International Conference on Learning Representations*, 2020

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, 10 models and more than 40 baseline benchmarks. Over 750 stars and 3,000 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 2,600 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`

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, DLG Workshop, KDD 2020
Reviewer, GRL Workshop, NeurIPS 2019

League branch secretary, Society of Photography, Peking University	*Sep. 2017 - June 2018*
Leader of story portrait group, Society of Photography, Peking University	*Apr. 2015 - Aug. 2017*
Member of organizers & news team, HackPKU, Peking University	*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)

Open-Source Contribution: PyTorch-Geometric, Gensim