Zhaocheng Zhu

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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
- · Multi-label classifier for Chinese intention understanding

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 30 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

Sep. 2017 - June 2018

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

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)