Pengyu Zhang 张鹏宇

PERSONAL INFORMATION

E-mail: realpizzaonline@gmail.com Mobile Phone: 0086-158-0134-9669

Born in Beijing, China

English level: IELTS (Academic) 6.5 Qualifications: Year 3 of Postgraduate

Contact Address: Beijing Artificial Intelligence Institute, Faculty of Information Technology,

Beijing University of Technology, Beijing 100124, China

Research field: heterogeneous graph; graph neural network; multi-view, data mining; deep learning

EDUCATION

Beijing University of Technology, Beijing, China (Project 211; Double First-Class University Project)

M.D. in Computer Science; GPA: 3.38 / 4

Advised by Prof. Yong Zhang (link)

Main courses: Stanford University CS224W: Machine Learning with Graphs; National Taiwan

University: Machine Learning; University of Michigan: Programming for Everybody

Shenyang Institute of Technology, Shenyang, China

B.D. in Automation; GPA: 3.14/4

Main courses: Advanced Mathematics & Calculus; Linear Algebra; Statistics and Probability Theory; Programming in C; Principles of Automatic Control; Digital Electronics Technology;

Analog Electronics Technology; Single-chip Technology and Application

PROJECT EXPERIMENTS Multi-view Multi-layer Attention Model for Node Classification: Graphs

2020.07-2021.06

composed of nodes and edges are everywhere in life. An accurate node relationship can help the model achieve better node representation learning. The use of multi-view and multi-layer attention networks can accurately describe the relationship between nodes. I was responsible for data preprocessing, model construction, code debugging, and the experimental part of the project. Moreover, I completed the writing of the first draft, the revision of and the submission of my paper. This project was funded by the National Science Foundation of China, China Association of Higher Education.

2020.03-2021.04

Visual Analysis for Name Disambiguation of Academic Papers: The visual presentation of academic social networks can help the university scientific research management department better perform the name disambiguation work in academic paper management. In the project, I was responsible for data cleaning, visualization system design, visualization interface design (Axure), visualization function realization (JavaScript, HTML), including the realization of linkage between different visualization modules. Use the graph neural network model (Python) to get the results on the Beijing University of Technology dataset and display them through the visual interface. Participate in the 14th International Contest of innovation and China College Students 'Internet+' Innovation and Entrepreneurship Competition. And I completed the writing of the first draft, the revision of and the submission of my paper.

Name Disambiguation based on the paper dataset of Beijing University of

Technology: In order to help the university management system better perform the name disambiguation work, a name disambiguation visualization

2019.10-2020.03

analysis method for academic papers is designed and implemented. In the project, I was responsible for data cleaning and extracting information such as keywords of the paper, ranking of the university and level of the journal in which the paper was published. The classification algorithm is used to determine the faculty to which the paper belongs.

'OVO' Smart Glass: The camera on the smart glasses performs video conferencing, face recognition and object recognition, and projects the recognized content onto the lenses. I was in charge of image acquisition and cutting, Gaussian blurring, and other processing in the project. I participated and orally defended in the 13th International Contest of innovation.

2019.06-2019.10

PUBLICATIONS

- [1] **Pengyu Zhang**, Yong Zhang, Yanjie Cui and Baocai Yin. Visual Analysis 2021.07 for Name Disambiguation of Academic Papers. (in Chinese) *Journal of Computer-Aided Design and Computer Graphics*. (Accepted, CCF-A)
- [2] Pengyu Zhang, Yong Zhang, Yanjie Cui and Baocai Yin. Visualization 2021.05 Analysis Method for Name Disambiguation of Academic Papers. (in Chinese) CAD & CG 2021. (Accepted)
- [3] Xin Zheng, Pengyu Zhang, Yanjie Cui, Rong Du and Yong Zhang. Dual-Channel Heterogeneous Graph Network for Author Name Disambiguation. Information 12.9 (2021): 383.
- [4] Chinese Patent: A classification method for academic papers based on multiview and multi-layer attention.
- [5] Chinese Patent: A visual analysis method for name disambiguation of 2021.09 academic papers.
- [6] China Software Copyright: Digital simulation reconstruction software based 2019.12 on light field.

WORKING PAPERS

- [1] **Pengyu Zhang**, Yong Zhang, Jingcheng Wang, Baocai Yin. MVMA-GCN: 2021.09

 Multi-view Multi-layer Attention Graph Convolutional Networks.

 Information Processing & Management. (Under Review, IF=6.2)
- [2] **Pengyu Zhang**. Graph Structure Generation based on Cross-view 2021.12 Comparative Learning. (First draft is being prepared)

ACTIVITIES & HONORS

- [1] Poster: China Conference on Computer-Aided Design and Computer 2021.11 Graphics.
- [2] The 14th International Contest of innovation, first prize at the college level. 2020.09 Visual Analysis for Academic Papers.
- [3] China College Students 'Internet+' Innovation and Entrepreneurship 2020.07 Competition, third prize at the provincial level. Visual Analysis for Academic Papers.
- [4] The 13th International Contest of innovation, second prize at the provincial 2019.10 level. 'OVO' Smart Glass.
- [5] The First Prize Scholarship in Beijing University of Technology. 2020

INTERESTS