

ZIYUE (JULIUS) YU

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RESEARCH INTERESTS

Medical AI, Interpretable Healthcare Analytics, Patient Representation Learning

EDUCATION

PhD in Computer Applied Technology, Macao Polytechnic University (MPU) 02/2026
Supervisor: [Prof. Giovanni Pau](#) ([University of Bologna](#) / [University of California, Los Angeles](#))
Co-supervisor: [Dr. Wuman Luo](#) (MPU)

MSc in Advanced Information Systems, Hong Kong Baptist University 07/2020

BEng in Computer Science and Technology, Zhejiang Chinese Medical University (Binjiang) 06/2019

PUBLICATIONS

- “A Multi-dimensional Feature Aggregation Network for Electric Vehicle Charging Demand Prediction”
Yi Yu, Lihua He, **Ziyue Yu**, Yanqiang Tu, Xiaozhu Jing, Wuman Luo.
Scientific Reports, 2026. [SCIE JCR Q1, IF: 3.9]
- “PSformer: Periodic-aware Semantic Transformer for Traffic Prediction”
Lihua He, **Ziyue Yu**, Wuman Luo.
38th IEEE Conference on Systems, Man and Cybernetics, 2025. [CORE B, CCF C]
- “PatSimBoost: Enhancing Patient Representations for Disease Prediction through Similarity Analysis”
Yuzheng Yan, **Ziyue Yu**, Wuman Luo.
10th International Conference on Internet of Things, Big Data and Security (IoTBDs), 2025. [CORE C]
Best Paper Candidate
- “Spectral Attention Feature Selection for Patient Mortality Prediction”
Yuzheng Yan, **Ziyue Yu**, Wuman Luo.
17th IEEE International Conference on Computer Research and Development (ICCRD), 2025.
- “Multi-Perspective Patient Representation Learning for Disease Prediction on Electronic Health Records”
Ziyue Yu, Jiayi Wang, Wuman Luo, Rita Tse, Giovanni Pau.
Journal of Knowledge and Information Systems (KAIS), 2024. [CCF B, SCIE JCR Q2, IF: 3.1]
- “Label Distribution Representation Learning in Document-level Sentiment Analysis”
Wenhao Zhu, **Ziyue Yu**, Kakit Chio, Wuman Luo.
9th IEEE International Conference on Computational Intelligence and Applications, 2024.
- “A Survey on Personalized Document-level Sentiment Analysis”
Wenhao Zhu, Jiayue Qiu, **Ziyue Yu**, Wuman Luo.
Neurocomputing, 2024. [SCIE JCR Q1, IF: 6.5]
- “MPRE: Multi-perspective Patient Representation Extractor for Disease Prediction”
Ziyue Yu, Jiayi Wang, Wuman Luo, Rita Tse, Giovanni Pau.
23rd IEEE International Conference on Data Mining (ICDM), 2023. [CORE A*, CCF B]
Regular Paper (acceptance rate: 9.37%), **selected as one of the best-ranked paper**
- “UCM: Personalized Document-level Sentiment Analysis based on User Correlation Mining”
Jiayue Qiu, **Ziyue Yu**, Wuman Luo.
19th International Conference on Intelligent Computing, 2023. [CCF C]

- “DMNet: A Personalized Risk Assessment Framework for Elderly People with Type 2 Diabetes”
Ziyue Yu, Wuman Luo, Rita Tse, Giovanni Pau.
IEEE Journal of Biomedical and Health Informatics, 2023. [CORE A*, SCIE JCR Q1, IF: 6.8]
[Medical Informatics Cover Paper](#)
- “Deep Learning Hybrid Models for COVID-19 Prediction”
Ziyue Yu, Lihua He, Wuman Luo, Rita Tse, Giovanni Pau.
Journal of Global Information Management, 2022. [SSCI JCR Q1, IF: 3.9]
- “Deep Learning for COVID-19 Prediction based on Blood Test”
Ziyue Yu, Lihua He, Wuman Luo, Rita Tse, Giovanni Pau.
6th International Conference on Internet of Things, Big Data and Security (IoTBDS), 2021. [CORE C]
[Best Student Paper Award](#)

SUBMITTED / UNDER REVIEW PAPERS

- “Correlation Aware HealthKit for Patient Representation Learning in Disease Prediction”
Ziyue Yu, Yuzheng Yan, Lihua He, Wei Ke, Dian Zhang, Wuman Luo.
European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Database (ECML-PKDD) 2026, Under Review. [CORE A, CCF B]

INTELLECTUAL PROPERTY

- “Method, Device and Storage Medium for Patient Representation Learning based on Dynamic Medical Correlation”, **Ziyue Yu**, Yuzheng Yan, Lihua He, Wei Ke, Wuman Luo (P. R. China Patent No. 202511579219.6)
- “Medical Payment Credit Assessment System”, **Ziyue Yu**, Yuhan Jiang, Kai Yan, Min Li (P. R. China Software Copyright No. 2019SR0075802)

SELECTED HONORS AND AWARDS

- MPU PhD Full Scholarship 2020 - 2023
- IoTBDS Best Student Paper Award 2021
- Hong Kong Baptist University Department of Computer Science Merit Scholarship 2020
- The Second Prize of Network and Information Security Contest (CTF Track) in Zhejiang 2018
- The Third Prize of Statistical Investigation Scheme Design Contest in Zhejiang 2017
- The Third Prize of Mathematical Contest in Modeling in Jiangsu 2016

INVITED PRESENTATIONS

- Machine Learning on Graph, Faculty of Applied Sciences, Macao Polytechnic University 2022
- Graph Representation Learning, School of Medical Technology, Zhejiang Chinese Medical University 2021
- How to Give an Effective Presentation, Faculty of Applied Sciences, Macao Polytechnic University 2021
- Deep Learning on Graph, Institute of Chinese Medical Sciences & State Key Laboratory of Quality Research in Chinese Medicine, University of Macau 2021

TEACHING EXPERIENCE

- COMP6132 Introduction to Big Data (Teaching Assistant), 2023/2024
- COMP6126 E-commerce with Big Data (Teaching Assistant), 2022/2023
- COMP112 Programming I (Teaching Assistant), 2022/2023
- COMP8122 Selected Topics in Big Data and Smart Society (Teaching Assistant), 2022/2023

ACADEMIC SERVICES

- Program Committee Member/Conference Reviewer: ICDCS, ICLR, KDD, AAAI, IJCNN, CHIL, SMC
- Journal Reviewer: npj Digital Medicine, Information Fusion, Information Processing and Management, Knowledge and Information Systems, Artificial Intelligence in Medicine, Biomedical Informatics, Neurocomputing, Engineering Applications of Artificial Intelligence, Expert Systems with Applications, Scientific Reports