Jixiang Yu

Tel.: +86-13125479277; Email: luvyfdawn@gmail.com

EDUCATION BACKGROUND

Dongbei University of Finance and Economics (DUFE) **09/2018-Present**

- **Major:** Computer Science and Technology
- **GPA:** 90.3/100 (professional ranking: 3/27, specialized courses ranking: 1/27)
- **Degree:** Bachelor of Science (in progress)
- **Core modules:** *C Programming* (99); *Python Programming* (98); *Java Programming* (99); *Algorithm Analysis and Design* (98); *Python Data Science and Engineering* (99); *Operating System* (98); *Construction and Maintenance of Website* (98)； *Data Mining*(98)

SCHOLARSHIPS, AWARDS AND HONORS

- Student Member of China Computer Federation (CCF)
- National Second Prize in the Contemporary Undergraduate Mathematical Contest in Modeling in Nov., 2020
- Second-class Comprehensive Scholarship of DUFE for the first semester of 2020-2021 Academic Year
- First Prize of Liaoning Division in the Contemporary Undergraduate Mathematical Contest in Modeling in Nov., 2020
- Advanced Individual in Subject Competition of DUFE in May, 2021
- First-class Comprehensive Scholarship of DUFE for the second semester of 2019-2020 Academic Year
- Third-class Comprehensive Scholarship of DUFE for the first semester of 2019-2020 Academic Year

RESEARCH EXPERIENCE

Research on Big Data Service Process Optimization and Dynamic Resource Allocation in Hybrid Cloud Environment, National Natural Science Foundation of China (71772033) and Research on Cloud Workflow Scheduling in a Container Environment Based on Deep Reinforcement Learning, Natural Science Foundation of Liaoning Province (2020-KF-11-11)

05/2020-Present

- Research objective: to solve the problem of low resource consumption on cloud better from a higher perspective
- Improved the Transformer, a representative architecture in deep learning, customized its position encoding and designed an attention mask to describe and characterize the graph structured data
- Designed a bilinear fusion module based on selective attention to integrate GNN and Transformer into an end-to-end architecture
- Tools and technologies applied: Python, CUDA, Deep Learning, Pytorch, Pytorch-geometric, Linux, and etc.

Research on Blood Mass Spectrometry for Disease Diagnosis (cooperated with Prof. Qian of Shanghai Jiaotong University)

06/2021-Present

- Research objective: to make full use of blood spectrometry for disease diagnosis
- Mainly responsible for deep learning algorithm implementation and feature interpretability research
- Tools and technologies applied: Python, CUDA, Deep Learning, Pytorch, Keras, Captum, and etc.

RESEARCH PAPERS IN SUBMISSION

- *Workflow Performance Prediction based on Graph Structure Aware Deep Attention Neural Network*. (**First Author**, cooperated with Prof. WAI HUNG IP and Prof. KAI LEUNG Yung of The Hong Kong Polytechnic University, submitted to Journal of Industrial Information Integration, IF=10.063, Dec, 2020, under review now);
- *Workload Prediction of Cloud Workflow based on Fusion Architecture of GNN and Transformer.* (**First Author**, cooperated with Prof. Weiguo Fan of University of Iowa, Prof. WAI HUNG IP and Prof. KAI LEUNG Yung of The Hong Kong Polytechnic University, submitted to IEEE Transactions on Systems, Man, and Cybernetics: Systems, IF=13.451, June, 2021, under review now);
- *Workload Prediction of Cloud Workflow based on Graph Neural Network*. (**Co-First Author**, submitted to The 18th International Conference on Web Information Systems and Applications (WISA2021), Sep, 2021, published).
- *A Transformer Based Sales Prediction of Smart Container in New Retail Era*. (**Co-First Author**, submitted to 2021 5th International Conference on Deep Learning Technologies (ICDLT), June, 2021, accepted).

ACADEMIC CONFERENCES

- 2021 5th International Conference on Deep Learning Technology in July, 2021
  Gave an oral presentation which was selected Best Report in the Session.
- YEF 2021 (stands for Youth Elite Forum)
- 2021 BAAI Conference (online)
- 2020 BAAI Conference (online)
- Will give an oral presentation in The 18th International Conference on Web Information Systems and Applications (WISA2021)

PROFESSIONAL SKILLS

Computer Skills

- Proficient in Python, Java, C Language
- Familiar with Linux and macOS
- web-based GUI development using HTML5, CSS, and JavaScript.

English Skills

- **IELTS:** (Test Date: 05/Sep/2021)
  Listening:6.5 Reading:8.0 Writing:6.5 Speaking:5.5 Overall Band Score:6.5
- **CET-6:** 548/710 (12/2020)