## Tengfei Lyu (吕腾飞)

No. 1 Duxue Road, Nansha District, Guangzhou, Guangdong 511458 P.R. China

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| **■** lyutf@outlook.com

| S Google Scholar

Research Interests: Urban Computing, Data Mining, Graph Neural Networks, Machine Learning

### Education \_

### The Hong Kong University of Science and Technology (Guangzhou)

Guangzhou, Guangdong

**PhD:** Artificial Intelligence, Information Hub

Sept. 2022

• Research Topic: Automated Spatio-temporal Forecasting

### **Central South University**

Changsha, Hunan

Master: Computer Technology, School of Computer Science and Engineering

Sept. 2019 - June 2022

• **GPA**: 3.6/4.0

• List of "Double First-Class" University Project, Project 985, Project 211

### **Providence University**

Taichung, Taiwan

**Exchange Student:** Computer Science & Information Engineering

Sept. 2017 - Jan. 2018

• Focused on six courses (Algorithms, Operating Systems, etc.), with an average score of 94.83

Bohai University

Jinzhou, Liaoning

**Bachelor:** Computer Science and Technology (Software Development)

Sept. 2015 - June 2019

• Ranking: 1/243; GPA: 4.01/5.0

## **Publications**.

#### [1]. MDNN: A Multimodal Deep Neural Network for Predicting Drug-Drug Interaction Events

Tengfei Lyu, Jianliang Gao, Ling Tian, Zhao Li, Peng Zhang and Ji Zhang

The 30th International Joint Conference on Artificial Intelligence (IJCAI), 2021. (CCF A)

### [2]. MGNN: A Multimodal Graph Neural Network for Predicting the Survival of Cancer Patients

Jianliang Gao, **Tengfei Lyu**, Fan Xiong, Jianxin Wang, Weimao Ke and Zhao Li

The 43th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2020. (CCF A)

### [3]. Predicting the Survival of Cancer Patients with Multimodal Graph Neural Network

Jianliang Gao, **Tengfei Lyu**, Fan Xiong, Jianxin Wang, Weimao Ke and Zhao Li

IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021. (JCR Q1, CCF B)

### [4]. Enhancing Drug-Drug Interaction Event Prediction from Knowledge Graphs by Multimodal Deep Neural Networks

Jianliang Gao, **Tengfei Lyu\***, Ling Tian, Zhao Li, Peng Zhang and Ji Zhang

IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021. Under Review, (JCR Q1, CCF B)

### [5]. Multi-label Metabolic Pathway Prediction with Auto Molecular Structure Representation Learning

Jiamin Chen, Jianliang Gao, **Tengfei Lyu**, Babatounde Moctard Oloulade, and Xiaohua Hu

IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 2021. (CCF B)

### [6]. Protein2Vec: Aligning Multiple PPI Networks with Representation Learning

Jianliang Gao, Ling Tian, **Tengfei Lv**, Jianxin Wang, Bo Song and Zhao Li

IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2019. (JCR Q1, CCF B)

### [7]. GraphPAS: Parallel Architecture Search for Graph Neural Networks

Jiamin Chen, Jianliang Gao, Yibo Chen, Moctard Babatounde Oloulade, Tengfei Lyu and Zhao Li

The 44th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2021. (CCF A)

### [8]. Graph Neural Architecture Search: A Survey

BABATOUNDE OLOULADE, Jianliang Gao, Jiamin Chen, Tengfei Lyu, Raeed Al-Sabri

Tsinghua Science and Technology, 2021. (JCR Q1)

### Patents \_

# [1]. Drug-drug interaction event prediction method, system, terminal and readable storage medium based on multimodal deep neural network

Jianliang Gao, **Tengfei Lyu**; China Invention Patent; Publication Patent Number: CN113012770A

### [2]. Alignment method of protein interaction network

Jianliang Gao, Ling Tian, Tengfei Lyu; China Invention Patent; Publication Patent Number: CN109767809A

## Other Projects \_\_\_\_

### [1]. Research on Drug Interaction Algorithm Based on Graph Neural Network

**Project Leader**, the Fundamental Research Funds for the Central Universities of Central South University, No.2021zzts0740

### [2]. A Disambiguation Algorithm for Authors with the Same Name Based on Graph Neural Network

Member, Hunan Provincial Innovation Foundation for Postgraduate, No. CX20200108

## Awards and Honors \_\_\_\_\_

2022.05	Outstanding Graduate of Hunan Province, Department of Education of Hunan Province
2022.05	Outstanding Graduate of Central South University, Central South University
2021.11	$\textbf{Goodix Technology Scholarship Special Award}, \ 15{,}000 \ \text{CNY}, \textbf{Goodix Technology}$
2021.10	President Innovation Scholarship, 24,000 CNY, Central South University
2021.10	Excellent Student Cadre, Central South University
2021.09	First Prize of Academic Scholarship, 12,000 CNY, Central South University
2020.11	<b>Third-Class Scholarship</b> , 3,000 CNY, Wondershare Technology Co., Ltd.
2020.10	National Scholarship, 20,000 CNY, Ministry of Education
2020.10	Outstanding Student, Central South University
2020.09	First Prize of Academic Scholarship, 12,000 CNY, Central South University
2020.07	ACM SIGIR Student Travel Grant, ACM SIGIR Conference on Information Retrieval
2019.09	First Prize of Academic Scholarship, 12,000 CNY, Central South University
2018.10	National Scholarship, 8,000 CNY, Ministry of Education
2018.10	The First Prize Scholarship, Bohai University
2018.06	<b>Principle's scholarship</b> , 10,000 CNY, Top Undergraduate Scholarship, 10 students in Bohai University
2018.06	Merit Student, Jinzhou City, Liaoning Province
2017.10	<b>Liaoning Provincial Government Scholarship</b> , 8,000 CNY, Department of Education of Liaoning Province
2017.10	The First Prize Scholarship, Bohai University
2017.06	Excellent League Member, Jinzhou City, Liaoning Province
2016.10	National Scholarship, 8,000 CNY, Ministry of Education
2016.10	The First Prize Scholarship, Bohai University

## 吕腾飞(Tengfei Lyu)

广东省广州市南沙区笃学路 7号

| S Google Scholar

研究兴趣:城市计算,数据挖掘,图神经网络,机器学习等

## 教育经历 \_\_\_\_

香港科技大学(广州)

广东,广州

博士,人工智能,信息枢纽

2022.09 -

• Research Topic: Automated Spatio-temporal Forecasting

中南大学 湖南,长沙

硕士, 计算机技术, 计算机学院

2019.09 - 2022.06

• **GPA:** 3.6/4.0

• 双一流 A 类高校、985、211

静宜大学 台湾,台中

交换生, 资讯工程学系

2017.09 - 2018.01

• 在此期间,重点研修了《算法导论》、《操作系统》等六门课程,成绩优秀,平均分为94.83

辽宁, 锦州 渤海大学

学士, 计算机科学与技术(软件开发), 信息科学与技术学院

2015.09 - 2019.06

• 成绩排名: 1/243; GPA: 4.01/5.0

## 学术论文 \_\_\_\_

### [1]. MDNN: A Multimodal Deep Neural Network for Predicting Drug-Drug Interaction Events

Tengfei Lyu, Jianliang Gao, Ling Tian, Zhao Li, Peng Zhang and Ji Zhang

The 30th International Joint Conference on Artificial Intelligence (IJCAI), 2021. (CCF A)

### [2]. MGNN: A Multimodal Graph Neural Network for Predicting the Survival of Cancer Patients

Jianliang Gao, **Tengfei Lyu**, Fan Xiong, Jianxin Wang, Weimao Ke and Zhao Li

The 43th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2020. (CCF A)

### [3]. Predicting the Survival of Cancer Patients with Multimodal Graph Neural Network

Jianliang Gao, Tengfei Lyu, Fan Xiong, Jianxin Wang, Weimao Ke and Zhao Li

IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021. (JCR Q1, CCF B)

### [4]. Enhancing Drug-Drug Interaction Event Prediction from Knowledge Graphs by Multimodal Deep Neural Networks

Jianliang Gao, **Tengfei Lyu\***, Ling Tian, Zhao Li, Peng Zhang and Ji Zhang

IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021. Under Review, (JCR Q1, CCF B)

### [5]. Multi-label Metabolic Pathway Prediction with Auto Molecular Structure Representation Learning

Jiamin Chen, Jianliang Gao, Tengfei Lyu, Babatounde Moctard Oloulade, and Xiaohua Hu

IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 2021. (CCF B)

### [6]. Protein2Vec: Aligning Multiple PPI Networks with Representation Learning

Jianliang Gao, Ling Tian, **Tengfei Lv**, Jianxin Wang, Bo Song and Zhao Li

IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2019. (JCR Q1, CCF B)

### [7]. GraphPAS: Parallel Architecture Search for Graph Neural Networks

Jiamin Chen, Jianliang Gao, Yibo Chen, Moctard Babatounde Oloulade, Tengfei Lyu and Zhao Li

The 44th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2021. (CCF A)

### [8]. Graph Neural Architecture Search: A Survey

BABATOUNDE OLOULADE, Jianliang Gao, Jiamin Chen, Tengfei Lyu, Raeed Al-Sabri

Tsinghua Science and Technology, 2021. (JCR Q1)

## 发明专利\_

### [1]. 基于多模态深度神经网络的药物-药物相互作用事件预测方法、系统、终端及可读存储介质

高建良, 吕腾飞; 国家发明专利; 公开号: CN113012770A

### [2]. 蛋白质相互作用网络的对齐方法

高建良, 田玲, 吕腾飞; 国家发明专利; 公开号: CN109767809A

## 其他项目 \_\_\_\_\_

### [1]. 基于图神经网络的药物相互作用算法研究

负责人, 中南大学研究生自主探索项目, No.2021zzts0740

#### [2]. 基于图神经网络的重名作者消歧算法

参与人,湖南省研究生创新项目(省级重点), No. CX20200108

## 奖励荣誉 \_\_\_\_\_

- 2022.05 湖南省优秀毕业生,湖南省教育厅
- 2022.05 中南大学优秀毕业生, 中南大学
- 2021.11 **汇顶科技奖学金特等奖**, 15,000 CNY, 汇顶科技
- 2021.10 校长创新奖学金, 24,000 CNY, 中南大学
- 2021.10 优秀学生干部,中南大学
- 2021.09 学业奖学金一等奖, 12,000 CNY, 中南大学
- 2020.11 三**等奖学金**, 3,000 CNY, 万兴科技
- 2020.10 **国家奖学金**, 20,000 CNY, 中华人民共和国教育部
- 2020.10 优秀学生, 中南大学
- 2020.09 **学业奖学金一等奖**, 12,000 CNY, 中南大学
- 2020.07 ACM SIGIR Student Travel Grant, ACM SIGIR Conference on Information Retrieval
- 2019.09 学业奖学金一等奖, 12,000 CNY, 中南大学
- 2018.10 **国家奖学金**, 8,000 CNY, 中华人民共和国教育部
- 2018.10 学习优秀奖一等奖, 渤海大学
- 2018.06 校长奖学金, 10,000 CNY, 渤海大学最高奖学金, 10 人/年
- 2018.06 三好学生, 辽宁省锦州市
- 2017.10 **辽宁省政府奖学金**, 8,000 CNY, 辽宁省教育厅
- 2017.10 学习优秀奖一等奖, 渤海大学
- 2017.06 优秀共青团员, 辽宁省锦州市
- 2016.10 **国家奖学金**, 8,000 CNY, 中华人民共和国教育部
- 2016.10 学习优秀奖一等奖,渤海大学