# Yuansheng Gao

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## EDUCATION BACKGROUND

# Ph.D. at Zhejiang University (ZJU)

09/2024-NOW

Doctor of Philosophy in Computer Science and Technology

• Advisor: Zonghui Wang, Wenzhi Chen

# **B.Sc. at Liaoning Technical University (LNTU)**

09/2020-07/2024

Bachelor of Science in Information and Computing Science

• Major GPA: 90.5/100 Overall rank: 1/116

#### RESEARCH INTEREST

**Current Research:** My research focuses on <u>generative artificial intelligence</u>, particularly (multimodal) large language models. I am specifically exploring content safety, knowledge-based Q&A, prompt learning, and fine-tuning. Additionally, I have a keen interest in the intersection of AI with the arts and other humanities disciplines.

**Undergraduate Research:** During my undergraduate years, I had the privilege of engaging in mathematical modeling and was awarded second prize in the <u>China Undergraduate Mathematical Contest in Modeling</u> in my sophomore year. It was during this time that I discovered my interest in metaheuristics. Alongside my undergraduate team, I contributed to the development of PID-based search algorithm (PSA), love evolution algorithm (LEA), and more.

### **PUBLICATION**

See all my publications on *Google Scholar*!

† denotes corresponding author; \* denotes joint-first author

Yuansheng Gao<sup>†</sup>, <u>PID-Based Search Algorithm: A Novel Metaheuristic Algorithm Based on PID Algorithm</u> [J], Experts System with Applications, 2023.12.01, **SCI Q1** 

Yuansheng Gao<sup>†</sup>, Jiahui Zhang, Yulin Wang, Jinpeng Wang, Lang Qin, <u>Love Evolution Algorithm: A Stimulus–Value–Role Theory-Inspired Evolutionary Algorithm for Global Optimization</u> [J], The Journal of Supercomputing, 2024.02.12, **SCI Q2** 

Yuansheng Gao<sup>†</sup>, Changlin Li, Lei Huang, <u>An Improved Deep Extreme Learning Machine to Predict the Remaining Useful Life of Lithium-ion Battery</u> [J], Frontiers in Energy Research, 2022.11.2, **SCI Q3** 

#### **HONORS & AWARDS**

*First prize*, 2022 National Student Mathematical Modeling Competition in Liaoning Province, top 5%, China Society for Industrial and Applied Mathematics, Municipal level

**Second prize**, 2022 The 3rd Liaoning Higher Education AI Challenge, for College Students, top 25%, The Educational Department of Liaoning Province, Municipal level 11/2022

*Third prize*, The 3rd Liaoning Province 3D Digital Innovation Design Competition, top 10%, The Educational Department of Liaoning Province, Municipal level

Second prize, 2022 Liaoning Higher Education Student Mobile Application Development Competition, top 15%, The Educational Department of Liaoning Province, Municipal level 10/2022

**Bronze prize**, "China Construction Bank Cup" The 8th Liaoning Province "Internet+" Student Innovation and Entrepreneurship Competition, top 4%, The Educational Department of Liaoning Province, Municipal level 09/2022

*Third prize*, The 10th National Mechanical Innovation Design Competition for College Students in the Huiyu Category and the Huiyu Engineering Technology Innovation Competition, top 33%, National Student Mechanical Innovation Design Competition Organizing Committee, National level 08/2022

of Liaoning Province, Liaoning Provincial Department of science and technology, Department of human resources and socia security of Liaoning Province, Liaoning Intellectual Property Office, Liaoning Academy of Social Science, Liaoning Association for Science and Technology, and Liaoning Federation of Students, Municipal level 08/2022 Second prize, 2022 The 3rd Underwater Intelligent Equipment Innovation and Design Competition, top 25%, The Educationa Department of Liaoning Province, Municipal level 08/2022 Third prize, 2022 Liaoning Higher Education Smart Agriculture Innovation and Entrepreneurship Competition for College Students, top 40%, The Educational Department of Liaoning Province, Municipal level 06/2022 Second prize, The 12th MathorCup Collegiate Mathematical Modeling Challenge, top 15%, Chinese Society of Optimization Overall Planning and Economic Mathematics, National level 06/2022 Third prize, 2022 Liaoning Higher Education Computer Design Competition for College Students, top 30%, The Educationa Department of Liaoning Province, Municipal level 06/2022 Third prize, 2022 Blue Bridge Cup National Software and IT Professional Competition in Liaoning, top 30%, Talent Exchang Center of Ministry of Industry and Information Technology, Municipal level 05/2022 First prize, 2021 Asia and Pacific Mathematical Contest in Modeling Certificate of Achievement, top 5%, Beijing Society of Image and Graphics, National level 12/2021 First prize, 2021 National English Translation Competition for College Students, top 5%, International Association of Teacher of English as a Forcign Language, Municipal level 12/2021 First prize, 2021 Liaoning Higher Education Radio Directional Competition for College Students, top 6%, The Educationa Department of Liaoning Province, Municipal level 12/2021 Third prize, 2021 Liaoning Higher Education "Aomei Greenie Cup" Energy Saving and Environmental Protection Student Province, Municipal level 11/2021 First prize, 2021 Liaoning Higher Education Radio Directional Competition in Liaoning	
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Association for Science and Technology, and Liaoning Federation of Students, Municipal level  Second prize, 2022 The 3rd Underwater Intelligent Equipment Innovation and Design Competition, top 25%, The Educationa Department of Liaoning Province, Municipal level  O8/2022  Third prize, 2022 Liaoning Higher Education Smart Agriculture Innovation and Entrepreneurship Competition for College Students, top 40%, The Educational Department of Liaoning Province, Municipal level  O7/2022  Second prize, The 12th MathorCup Collegiate Mathematical Modeling Challenge, top 15%, Chinese Society of Optimization Overall Planning and Economic Mathematics, National level  O6/2022  Third prize, 2022 Liaoning Higher Education Computer Design Competition for College Students, top 30%, The Educationa Department of Liaoning Province, Municipal level  O6/2022  Third prize, 2022 Blue Bridge Cup National Software and IT Professional Competition in Liaoning, top 30%, Talent Exchange Center of Ministry of Industry and Information Technology, Municipal level  O5/2022  First prize, 2021 Asia and Pacific Mathematical Contest in Modeling Certificate of Achievement, top 5%, Beijing Society of Image and Graphics, National level  12/2021  First prize, 2021 National English Translation Competition for College Students, top 5%, International Association of Teacher of English as a Foreign Language, Municipal level  12/2021  First prize, 2021 Liaoning Higher Education Radio Directional Competition for College Students, top 6%, The Educationa Department of Liaoning Province, Municipal level  Third prize, 2021 Liaoning Higher Education Radio Directional Competition for College Students, top 6%, The Educationa Science and Technology Innovation Competition, top 10%, The Educational Department of Liaoning Province, Municipal level  Third prize, 2021 Liaoning Higher Education Sudent Modeling Competition in Liaoning Province, top 5%, China Society for Industrial and Applied Mathematics, Municipal level  Third prize, 2021 Liaoning Higher Education Sudent Mobi	
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# PROFESSIONAL SERVICE

Second prize, China Undergraduate Mathematical Contest in Modeling, top 2.3%, China Society for Industrial and Applied

11/2020

**Journal Reviewer:** Journal of Bionic Engineering, Journal of Electrochemical Energy Conversion and Storage.

Mathematics, National level