Zixuan He

Personal Information

Zixuan He
Nanjing University of Finance & Economics
NO.3 Wenyuan Road, 210023
China Nanjing

Tel.: +(86)18951396829
Email: zixuanhe921@outlook.com

GitHub: https://zixuan1208.github.io/zixuan/

Education

09/2020–05/2024	**B.S Computer Science and Technology**,
	Nanjing University of Finance & Economics,Nanjing,China
	Cumulative GPA: 3.66
	Advisor: Prof. Lei Zhang

Relevant Courses:

advanced mathematicsI, Advanced MathematicesII, Discrete Mathematics, Object-Oriented Programming (JAVA) (bilingual), Web Technology Basics, Data Structure and Algorithm, Principles of Database System, Linear Algebra, Android Application Development, Probability Theory and Mathematical Statistics, Data Mining, Principles of Computer Composition, Software Engineering, Compiler Pringciples, Operating System, Design and Development of Microcomputer Application System

Research Interest

Efficient Machine Learning, Deep Learning

Computer Vision, Multimodality

autonomous driving, HCI,

Publications

1. **Zixuan,He**, Xiaoxu, L., and Tianze, C. Application model of forest value based on carbon storage analysis. *Academic Journal of Mathematical Sciences* (2022)

2. Songyu, D., **Zixuan,He**, and Niu, M. Research on vehicle detection algorithm based on improved yolov5. In *2023 IEEE 2nd International Conference on Electrical Engineering, Big Data and Algorithms (EEBDA)* (2023)

COMPETITION EXPERIENCE

03/2022–08/2022   **China National Undergraduate Computer Design Competition**
Membership   Advised by Prof. Lei Zhang

- Achieved correct identification of the color and type of lane lines and road signs, zebra crossings, and red and green on main roads.
- Combines the LaneNet structure and Yolov5.
- Won the third prize of the national level.

12/2022–01/2023   **17th National College Students' Smart Car Competition**
the lead person in charge   Advised by Prof.Lei Zhang

- Designed and developed an unmanned vehicle utilizing computer vision, sensing technology and positioning systems.Combined with 5G network communication systems, it allows for faster and more reliable communication between the vehicle and remote control.
- Oversaw the team's progress, managed tasks, coordinated team members, and ensured that our projects met competition deadlines
- Won the first prize of the state.

12/2022 – 02/2022   **MCM/ICM**
Membership   Advised by Prof. Jingsan Yang

- Analyze the topic, select the model with teammates and write a thesis.
- Master thesis typesetting, paper language use, and basic models.
- Received Honorable Mentions.

RESEARCH EXPERIENCE

A multimodal study of speech-to-action

04/2023 - Present

Research Assistant   Advised by Prof. Ming Xu

- Read papers on the diffusion model in 3D and communicate regularly with my mentor
- Study the code for the direction of stable diffusion
- Preparing for publication in September

Innovation and entrepreneurship training program for college students

04/2022–05/2023

Membership   Advised by Prof. Qinghua Zhao

- Studied the crowd density counting structure based on DecideNet algorithm in congested scenarios.
- Attempted to replace the Euclidean distance based convolutional neural network model with void convolution and structural similarity loss, and studied the performance of RegNet block and DetNet block algorithms in the improved DecideNet mode
- establish a project at the school level successfully

Work Experience

12/2022–02/2023 **Siyang Weixiang Culture Media Co.Ltd**
interns

- Learned skills in image processing and maintained software systems
- Assist leaders in data processing.
- Obtained experience in debugging code and analyzing structures from previous generations.

Honors, Awards & Scholarships

01/2023	National First Prize of National College Student Smart Car Competition
08/2022	The third prize of the national-level unmanned driving challenge in the China Robotics Competition
12/2022	MCM/ICM received Honorable Mentions
12/2022	Won the honor of school scholarship, quality development scholarship, and outstanding college student and excellent class leader.(every semester)
11/2022	Excellent University of Nanjing University of Finance and Economics(Every year)
05/2022	Provincial Third Prize of the 19th May 1st Mathematical Modeling Competition
01/2022	Third Prize in the 11th APMCM Asia Pacific University Mathematical Modeling Competition

Skills:

Python, Pytorch, Deep Learning, Java, SQL, Linux command

Service

Awarded the title of excellent volunteer by the government method.
Volunteer trip alone for half a month.
Participated in the school volunteering section.