

WeizhengWang

Date of Birth: 15/12/2002



Contact

📞 +86 18932605293

✉ mr.lawrance@foxmail.com

Education Background

September 2021 - Present

Bachelor's Degree in Computer Science and Technology, North China Institute of Science and Technology. **GPA 90.0/100**

Courses : C Programming, HTML Front-end Design, Object-Oriented Programming (Java), Web Application Design (JSP), Data Structures, Linux Operating System, C++ Programming, Python Programming, ASP.NET, JavaEE, OpenCV (C++), Computer Networks, Operating Systems, Computer Organization Principles, Cloud Computing and Big Data Processing, Dive into Deep Learning.

Skills

- ◆ Proficient in C/C++, Java, Python programming languages.
- ◆ IELTS 6.5 (Overall)
- ◆ Familiar with operating system principles and Linux system development; proficient in Linux management and daily maintenance; MySQL database development capability.
- ◆ Proficient in OpenCV (C++/Python) development.
- ◆ Familiar with Pytorch, Darknet and other mainstream deep learning development frameworks, and have many scientific research project practice experience.
- ◆ Proficient in deep learning image classification and object detection algorithms (Yolo, mmdet, ssd, rcnn).
- ◆ Understanding of NVIDIA hardware acceleration and CUDA.

Project Experience

June 2023 - January 2024

Hebei Province Key Scientific Research and Development Project

"Baiyangdian Ecological Internet of Things Three-dimensional Monitoring System

Project Number: 19270318D

- ◆ Developed object detection technology for mining trucks using the YOLOv7-tiny model under the Darknet framework, achieving a 2% increase in recognition accuracy at almost no cost of frame per second reduction in FPS.
- ◆ Improved and developed a dual-modal object detection technology for low-altitude infrared-visible light from drones using the YOLOv8 series. The business end can achieve real-time multi-modal video recognition results at 65% mAP under a frame rate of 30FPS deploying with laptop.
- ◆ **Publication:** Wu, J. , **Wang, W.** and Ni, X. (2023) Study on the Application of Real-Time Drone Monitoring in Ordos Open-Pit Coal Mine. Open Journal of Applied Sciences, 13, 483-495. doi: 10.4236/ojapps.2023.134039.
Junyi Wu, **Weizheng Wang**, Lei Yang, Xuesong Ni, and Liqin Tian "Research on industrial meter readings based on improved YOLOv8", Proc. SPIE 13181, Third International Conference on Electronic Information Engineering, Big Data, and Computer Technology (**EIBDCT 2024**), 131815G (19 July 2024); <https://doi.org/10.1117/12.3031129>, **EI Conference**

January 2024 - July 2024

Beijing Elite Intelligence Company, North China Institute of Science and Technology "Robotics plus Applications" Project – "Automatic Inspection and Rescue Based on Drone Nest" Research Cooperation Project

- ◆ During the internship, developed multiple services including "water count detection," "conveyor belt deviation detection," "infrared-visible light bimodal fusion visual video," and "DeepSort+YOLOv8 truck tracking" in open-pit mines based on YOLOv8.
- ◆ Technical Stack: PyTorch, ONNX, Linux, YOLO
- ◆ **Publications:** **W. Wang**, J. Wu and Y. Li, "Real-time monitoring of trucks used in open pit based on aerial video of UAV," 2024 3rd International Conference on Robotics, Artificial Intelligence and Intelligent Control (RAIIC), Mianyang, China, 2024, pp. 130-138, doi: 10.1109/RAIIC61787.2024.10671199. **IEEE**

Patents:

- ◆ Utility Model Patent Certificate for Automatic Battery Change Arm for Drones: Patent No. ZL 2023 2 3426097.6

Honors and Awards

- ◆ 2022 Outstanding Student
- ◆ 2022 **First-Class** Scholarship
- ◆ 2022 **Third Prize** of National College Students' Mathematics Competition
- ◆ 2022 **First Prize** of National College Students' Technological Innovation and Entrepreneurship Competition
- ◆ 2023 **Second Prize** of National College Students' Digital Skill Application Competition
- ◆ 2023 **Second Prize** of International Intercollegiate Mathematical Modeling Competition
- ◆ 2023 **Second Prize** of Huashu Cup Mathematical Modeling Competition
- ◆ 2023 **First Prize** of Zhongjiao Cup Mathematical Modeling Competition
- ◆ 2023 **Second Prize** of Challenge Cup Science and Technology Invention
- ◆ 2023 **First Prize** of National College Students' Data Analysis Competition
- ◆ 2023 **Bronze Award** of China International College Students' Innovation Competition
- ◆ 2023 **Grand Award** National 3D Digitization Innovation Competition
- ◆ 2023 **Hosted one** provincial-level entrepreneurship and **research project, guided three innovation projects**
- ◆ 2023 Participated in **Hebei Provincial Science and Technology Department** Key Research and Development Project
- ◆ 2024 Hosted a **national-level undergraduate innovation** training research project

Personal Profile

- ◆ Steady and meticulous, dedicated to work, capable of completing tasks enthusiastically. Warm and gentle personality, able to get along well with others.
- ◆ Passionate about programming and eager to continuously improve technical skills in the workplace.
- ◆ Github [4everImmortality \(Mr.Lawrence\) \(github.com\)](https://github.com/4everImmortality)

<https://github.com/4everImmortality>