# Yongshuo Liu

No.2 Poyanghu Road, Shinan Dist, Qingdao, Shandong, China

YongshuoLiu.github.io

### Education

# Qingdao Agricultural University

Bachelor of Engineering in Computer Science, GPA:3.33/4.0

Qinqdao, Shandong

Sep. 2019 - May 2023

Thesis: Design and Implementation of Face Recognition Sign-in System Based on Deep Learning and Flask

Research focus: Application of deep learning in navigational systems

### Relevant Coursework

• Algorithm Design • Data Structure

- Computer Organization
- Computer Network
- Operating System
- Machine Learning
- Deep Learning • Blockchain

# **Publications**

# Research into Ship Trajectory Prediction Based on An Improved LSTM Network

Jiangnan Zhang<sup>1</sup>, Hai Wang<sup>2</sup>, **Yongshuo Liu**<sup>2</sup>, Zhenxing Liu<sup>2</sup> and Junyu Dong<sup>1,\*</sup>

June 2023

**JMSE** 

**JMSE** 

# Research On Multi-Source Ship Trajectory Processing And Matching Method Based On Graph Neural Network

Under peer review

Jiangnan Zhang<sup>1,2</sup>, **Yongshuo Liu**<sup>3</sup>, Fengjuan Cui<sup>4</sup>, Zhenxing Liu<sup>3</sup>, and Junyu Dong<sup>1,\*</sup>

Scientific Reports

# Research On Maize Disease Identification Methods In Complex Environments Based On Cascade Networks And Two-Stage Transfer Learning

Hongxin Liu, Haichen Lv, Jiajun Li, Yongshuo Liu and Limiao Deng

November 2022

# **Projects**

# Shandong Province Agricultural Science and Technology Service Project

August 2019 - August 2022

Construction of Agricultural Science and Technology Service Application System

- System Design and Implementation: Participate in the development of the Science and Technology Special Commissioner System, ensuring streamlined operations and enhanced service delivery.
- Target Detection Algorithm Development: Developed a Faster R-CNN-based approach to extract features from pest and disease-affected areas, significantly enhancing classification accuracy.
- Efficient Classification Model Development: Implemented dynamic convolution and early exit mechanisms to boost both model accuracy and computational efficiency.
- Patents Awarded: Song Caixia, Xu Pengmin, Yongshuo Liu, Qi Zhiguo (2020). A reservation system for science and technology special commissioners, Chinese Patent CN111931964A.
- Patents Awarded: Zhang Jiangnan, Dong Junyu, Gao Feng, Wang Hai, Li Wenbo, Yongshuo Liu (2022). Method for identifying multiple types of crop leaf diseases using dynamic neural networks, Chinese Patent CN114022872A.

### Technical Skills

Languages: Python, C, C++, HTML/CSS, JavaScript, SQL

Developer Tools: Pycharm, Eclipse

Technologies/Frameworks: Pytorch, Tensorflow, Flask, sklearn, Linux

#### Honors & Awards

2020 National Inspirational Scholarship, Recognizes outstanding computer majors, nominated by faculty.

2021 Third-Class Scholarship, Recognizes outstanding computer majors, nominated by faculty.

2021,2022 Third Prize, National Undergraduate Mathematical Modeling Contest, nominated by the Shandong Education Department.

2023 First-Class Scholarship, Recognizes outstanding computer majors, nominated by faculty.

2023 Outstanding Bachelor's Thesis, selected by Qingdao Agricultural University

2019 2023 Merit Student, Recognizes outstanding computer majors, nominated by faculty.