Rongkun Zhu

Tel: 18429087628 Email: mrpigzrk@gmail.com
DoB: February 15,2003 Address: Shannxi, Xian

EDUCATION

Xidian University Sep 2021 – Jun 2025

Relevant Coursework: GPA:3.5/4, Specialty Experiment of Artificial Intelligent **(98)**, Cognitive Computing **(95)**, Programming **(95)**, Deep Learning **(94)**, Image Processing and Machine Vision **(94)**, Labor Practicing **(Excellent)**.

AWARD & HONER

- National Computer Design Competition: National Bronze Award, 2024, (3/350) ;
- National Statistical Modeling Competition: Gold Award in the Shaanxi Province, 2023, (4/200);
- National Scholarship Candidate, 2023-2024, (10/340);
- The First Prize Scholarship, 2023-2024, (7/175);
- The Third Prize Scholarship, 2022-2023, (32/175);
- Computer Software Copyright: Intelligent Fault Operation and Maintenance System under Variable Conditions, 2024.

RESEARCH EXPERIENCE

Palm Detection in Ecuadorian Tropical Forest Jan 2024 – Aug2024

Primary Contributor

- Project Description: Utilizing a novel palm dataset, this project addressed the challenges of detecting and classifying palms under complex conditions with a forest background.
- Main Contributions: Responsible for segmenting and converting collected TIF images into a usable dataset; conducted rigorous comparative experiments on State-of-the-Art models of various scales and architectures on the new dataset, including the YOLO series and ViT; evaluated the performance of different models on this dataset using multiple metrics, authored a paper analyzing the strengths and weaknesses of the models in complex backgrounds.

Contrastive Learning Framework for Planet and World-View Imagery Feb 2024 – Present

Participant

- Project Description: Developed a framework based on Ial-SimSLR for multimodal and multi-resolution contrastive learning to analyze Planet and Worldview satellite images, aiming to convert images between these two types of satellites.
- Main Contributions: Proposed a new network architecture and was responsible for building the network; contributed to the writing parts of the paper.

Few-Shot Time Series Classification Mar 2023 – Oct 2023

Participant

- Project Description: Developed a novel learning framework capable of efficiently classifying time series data, addressing the challenges of data scarcity and the need for large, annotated datasets with minimal training samples.
- Main Contributions: Responsible for the experimental section, testing our model against traditional methods across multiple datasets, comparing the amount of training data required to achieve the same accuracy.

PUBLICATIONS

- Wenxuan Wang, **Rongkun Zhu**, Dan Wang. *'MSFT: Leveraging Manifold Transformation and Multi-scale Convolutional Neural Network for Few-Shot Time Series Classification'*. TPAMI (2023). (Under Review)
- Kangning Cui, **Rongkun Zhu**, Manchin, *et al.* *'Trustworthy Real-Time Detection, Segmentation and Counting of Palms with UAV Imagery in Ecuadorian Rainforests'*. AAAI (2025) (Under Review)

LEADERSHIP EXPERIENCE

- Represented the college in the university wide **Top Ten Class Defense Competition.**
- Served as the captain of the Institute football team, leading the team to achieve 2ed and 3rd place consecutively for 2 years.