NING GAO

EDUCATION BACKGROUND

Xi'an Jiaotong University, Xi'an

Bachelor's Degree in Artificial Intelligence (in progress), GPA (excluding electives) 91.44, ranked 5/64, received a ranking bonus, secured a stable recommendation for postgraduate study, currently a sophomore.

RESEARCH/COMPETITION EXPERIENCE

PMT: Progressive Mean Teacher via Exploring Temporal Consistency for Semi-SupervisedMedical Image SegmentationOctober 2023 – July 2024

ECCV2024 Accept List (Final Score 554) First Author

Project Description: This project proposes a simple yet effective semi-supervised learning framework for medical image segmentation. It constructs a co-training framework with two sets of Mean Teachers, leveraging the **representation differences at different iterations** between networks to build stable diversity among models. Based on this, **pseudo-label filtering and difference-driven alignment** brings robust regularization constraints to training. The paper achieved **state-of-the-art performance** in the field, demonstrating the method's **generalization ability** across different datasets.

Responsibilities: As an undergraduate research intern in an on-campus research group, I independently proposed the research idea, conceived and implemented the model, conducted experimental work (including comparative and ablation studies), and, with the assistance of my advisor, completed the paper writing and illustration. **The paper is accepted by ECCV2024 with final score 554**.

Study about Meta Learning with Mean Teacher

February 2024 – Present

September 2022 – Present

2022 – Present

Under Research First Author

Responsibilities: As an undergraduate research intern in an on-campus research group, I independently proposed the research idea and wrote the code. Currently, I am working on further improvements and adjustments to the model's structure.

RoboMaster University Championship

Linux, C++, OpenCV Leader of Vision Group

Project Description: This project involves designing and deploying vision programs for robots in the Robo-Master University Championship. The vision program aims to identify and predict the motion trajectory of robots, performing kinematic calculations to guide the robot's projectiles. Tasks also include SLAM.

Responsibilities: As the leader of the Vision Group of Xi'an Jiaotong University's Duxing Team, I led the team to win the National First Prize in the RoboMaster Mech Master Super Competition. My responsibilities included:

- Completing target detection using traditional vision and deep learning methods and implementing target tracking with EKF and other filtering algorithms.
- Debugging and developing ROS-based SLAM programs to achieve autonomous navigation and obstacle avoidance.

Awards

ECCV 2024 Accept List, PMT: Progressive Mean Teacher via Exploring Temporal Consistency for Semi-
Supervised Medical Image Segmentation2024.07National First Prize, RoboMaster Mech Master Super Competition National Finals2023.08Special Development Award, Xi'an Jiaotong University Megvii Scholarship2023.10