# WEIFENG YUAN

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#### **EDUCATION**

Bachelor of Engineering in Computer Science and Technology, Nankai University

Sept 2019 – Jun 2023

GPA: 87.87 (3.66) — Rank: 25/126

#### RESEARCH

# Nankai University, Tianjin, China

Media Computing Lab, College of Computer Science Research Assistant, Advisor: Prof. Qibin Hou Nov 2022 – May 2023

### Action segmentation based on multi-scale attention

- Proposed an action segmentation method based on multi-scale attention, effectively addressing the limitations of existing methods in processing temporal and spatial information.
- The Transformer attention mechanism was introduced into the MS-TCN framework, enabling it to adaptively process action features of different scales and improve segmentation accuracy.
- The effectiveness and superiority of the proposed method are verified through extensive experiments, providing a new solution for the field of video action segmentation.

# Label propagation via correlation matching for semi-supervised semantic segmentation

- Introduced an adaptive threshold updating strategy with a relaxed initialization to expand the high-quality regions.
- Proposed to propagate high-confidence predictions through measuring the pairwise similarities between pixels.
- Received a 76%+ mIoU score on the Pascal VOC 2012 segmentation benchmark with only 92 annotated images provided.

# **PUBLICATIONS**

1. Bo-Yuan Sun, Yuqi Yang, **Weifeng Yuan**, Le Zhang, Ming-Ming Cheng, Qibin Hou. CorrMatch: Label Propagation via Correlation Matching for Semi-Supervised Semantic Segmentation. Submitted to 2023 Conference on Neural Information Processing Systems (NIPS). Under review.

# **ENTREPRENEURSHIP**

Founder and CEO

May 2023 - now

Tianjin Fengshuo Technology Co., Ltd.

Tianjin, China

• Led a team of 40 professionals in providing career guidance to computer science majors.

### HONORS AND AWARDS

• First Prize of the Qihang Award of Nankai University (3 students in NKU each year)

Jun 2023

• Outstanding Academic Scholarship of Nankai University (Top 6%)

Oct 2022

### **MISCELLANEOUS**

Skills. Pytorch, TensorFlow, Python, C++, Java, etc.

Hobbies. Running(Completed multiple half-marathons), Swimming, badminton.

**Personal Profile.** Demonstrates leadership and innovation, supported by a self-motivated and confident demeanor.