Minghao Guo

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in Minghao Guo

https://minghaoguo20.github.io/

Education

2020.09 - 2024.06

B.S., Zhejiang University Ocean Technology.

GPA: 90.19/100 (Rank: 8/142)

2022.09 - 2022.12

Exchange, The Chinese University of Hong Kong Computer Science.

Research Experiences

2023.07 - now

■ Diffusion Model based Video Editing

Mentor: Prof. LinChao Zhu @ZJU CCAI lab (intern)

I proposed a diffusion model based video editing method. Given a **texture reference image** and a **video sequence** as input, our method can **replace the texture of the video** with the texture of the reference image while preserving the structure of the video.

2023.02 - 2023.04

Robust Sentence-Level Evaluation

Cooperator: Xiangru Tang, Yilun Zhao @Yale (Remote RA)

To address the issue of **hallucinations and factual inconsistencies** in long text summary task in current language models, we proposed a set of solutions. The paper is currently under review.

2022.11 - 2022.12

▼ Voice Conversion

Mentor: Dr. Chuck-jee CHAU @CUHK (AIST2010 class project)

We proposed a method for regenerating music based on some given music track. We use Multi-scale Multi-band DenseNet to seperate the vocal and the background music, and then use the voice conversion method to change the two parts.

2022.07 - 2022.10

Underwater Overlapping Fish Detection Study

Mentor: Prof. Hui Huang @ZJU (SRTP)

Based on yolov5, we perform detection of underwater targets. Our work consists mainly in adding preprocessing, adding attention mechanisms and using pretrained models.

Miscellaneous Experience

Scholarship

2022 📕 China Harbor Scholarship

2021 China National Scholarship

Competition

2022 First Prize of Zhejiang Province Student Physics Innovation, Theory

Third Prize of National Zhou Peiyuan University Mechanics Competition, Individual Competition

First prize in the National University Mathematics Competition, non-mathematics group

First prize in the National University Mathematics Competition, non-mathematics group