

# Wenjie Shu

 google scholar    UESTC    Information Engineering    Chengdu

## Basic Information

- Male   22 years old   Han ethnicity   member of Communist Party of China   IEEE Student Member
- **GPA:** 3.74/4.0   **Email:** wenjieshu2003@gmail.com

## Research Experience and Achievements

- CMT: Cross Modulation Transformer with Hybrid Loss for Pansharpening GRSL
- DDA: A dual-domain attention plug-and-play prior for pansharpening 2024 ICLR tiny
- Exploring the Low-Pass Filtering Behavior in Image Super-Resolution 2024 ICML
- Videogen-of-thought: A collaborative framework for multi-shot video generation 2026 NIPSW
- LightGen: Efficient Image Generation through Knowledge Distillation and DPO under review
- Temporal Regularization Makes Your Video Generator Stronger under review
- Go with Your Gut: Scaling Confidence for Autoregressive Image Generation under review
- Enhancing Diffusion-based Restoration Models via Difficulty-Adaptive Reinforcement Learning with IQA Reward under review
- AlignVid: Training-Free Attention Scaling for Semantic Fidelity in Text-Guided Image-to-Video Generation under review
- ThinkVid: Benchmarking Visual Reasoning in Video Generative Models under review
- CoRe-GRPO: Consensus-driven and Region-focused RL for Human-Centric Generation in Lightweight Diffusion Models under review
- **Researcher, Everlyn AI** 2025.06 - now  
Conducted research under the supervision of Professor Sernam Lim, image/video generation, especially reinforcement learning, long video generation and world model benchmark.
- **Visiting Student, HKUST, Generative AI** 2024.09 - 2025.6  
Conducted research under the supervision of Professor Harry Yang, investigating video generation/editing applications.
- **Researcher, CUHKSZ, Video Generation** 2024.06 - 2024.08  
Under the supervision of Professor Qiang Sun and Benyou Wang, participated in a video generation engineering project focused on enhancing video resolution and quality. Developed the data pipeline to efficiently process and feed training data into the model and implemented the super-resolution component of the model architecture to upscale low-resolution video frames.
- **Research Assistant, UESTC, Pansharpening** 2022.06 - 2024.04  
Under the guidance of Distinguished Researcher Liangjian Deng, conducted research in remote sensing image fusion, super-resolution, and hyperspectral compression snapshot imaging. Research topics include: integrating modulation techniques from signal processing into attention mechanisms to effectively coordinate the advantages of panchromatic and multispectral images for pansharpening, while proposing a hybrid loss function combining wavelet and Fourier transforms to further enhance image fusion quality (CMT, first author); designed a new plug-and-play module that combines convolution and attention mechanisms to effectively improve performance metrics in image fusion tasks (DDA, first author).

## Project Experience

- **China International College Students' Innovation Competition** 2023.04 - 2023.12  
Core member of the Xin Cheng Rui Pin project, leading market research and presentation preparation. Awarded a national silver award for innovation in frequency synthesis chip technology.
- **Sound Source Localization and Tracking System** 2022.06 - 2022.08

As a core member, utilized stm32F407 and microphone sensors with the generalized cross-correlation algorithm to complete the design of a sound source localization and tracking system.

## Honors and Awards

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Second Prize Scholarship for Academic Achievement (2021-2022), Model Scholarship (2022-2023), Provincial Second Prize in National College Students’ Internet of Things Competition (2023), National Third Prize in National College Students’ Optoelectronic Design Competition (2023)

## Student Activities

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Member of the Bee’s Home Teaching Team (2021-2022), Excellent Group Leader of the ”Xin Tong Innovationbc Center” (2022-2023), Council Member of the Applied Electronic Association (2022-2023)

## Skills and Languages

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<b>Frameworks</b>	Pytorch, LaTeX
<b>Languages</b>	CET-4: 576 CET-6: 480
<b>Programming</b>	Python, C/C++, Matlab, Verilog, FBD, Halcon
<b>Hardware</b>	Schematic Design, High-speed PCB Design, SolidWorks