



Zhaowei Gao

Paul-Feyerabend-Hof.1a HW35
28049 Zürich, Switzerland

+41 (0)779622801

✉ zhagao@ethz.ch

🌐 Personal Homepage

🐙 GitHub Profile

🌐 LinkedIn Profile

EDUCATION

•ETH Zürich

2019-2023

Msc in Electrical Engineering and Information Technology GPA 5.0/6.0

Zürich, Switzerland

- Research Interest: Computer Vision, Image and Video Processing, Human-Computer Interaction, NLP
- Courses: Machine Learning, Deep Learning, Probabilistic Artificial Intelligence, Virtual/Augmented Reality, Big Data

•Karlsruhe Institute of Technology

2016-2019

Bsc in Electrical Engineering and Information Technology GPA 1.9/1.0

Karlsruhe, Germany

EXPERIENCE

•NLP Research Intern

11/2023 - 02/2024

Aiwave ETHZ Spinoff

Hangzhou, China

- Modified large language model for specific character chat
- Data processing/synthesis/Analysis

•A Stronger Baseline For Video Deinterlacing[\[Arxiv\]](#)

02/2023 - 08/2023

Disney Research Studio Supervised by Dr. Yang Zhang and Prof. Markus Gross

Zürich, Switzerland

- Paper submission to Conference and US Patent under review
- Designed a deep network for Image & Video Restoration(Deinterlacing)
 - Incorporates a mechanism for the propagation of temporal information in both image and latent space,
 - Propose a Flow-guided Refinement Block (FRB): flow-guided deformable convolution alignment.
 - Leveraging bidirectional parallel propagation at multiple scale.
 - Our model is lightweight and capable of simultaneously outputting six deinterlaced video frames.
 - This makes it a promising candidate for real-time deinterlacing applications.
 - Training the model at two distinct parameter levels.(namely 0.5M and 9M).
 - Our extensive experimental results demonstrate that our proposed method achieve state-of-the-art performance on 4 various dataset. PSNR/SSIM improved by averagely 0.5DB/0.005.

•AR Application Development for Architecture [\[Repository\]](#)

10/2022 - 02/2023

Research Assistant in Landscape Architecture Group, ETHZürich

Zürich, Switzerland

- Developed and created an AR application based on Unity, C#, and the Hololens 2
- The application enabled users to interact with real-world architectural scenes in augmented reality
- Accurately locates, displays, and records the spatial points needed by architects

PROJECTS

•New Adventures in Noise Modeling [\[Report\]](#)

06/2022 - 10/2022

Disney Research Studio Supervised by Dr. Yang Zhang and Prof. Markus Gross

Zürich, Switzerland

- Investigated a novel method to generate realistic noisy images
- Combined physics-based statistical methods with GAN-based training Network
- Designed and trained a Network (PyTorch framework, SIDD dataset) to generate synthetic noisy images
- The synthetic noisy images could be used for further denoising tasks
- Solved the challenging issue of collecting paired real noise-free and noisy image data

TECHNICAL SKILLS

Languages: English (fluent), German (fluent), Chinese (native) Shanghainese(native)

Technical: Python (PyTorch), C#/C++, Matlab, Unity, Linux, Git, LaTeX