Haoning Wu

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EDUCATION

Nanyang Technological University, Singapore Ph.D. Candidate

Aug 2021 - May 2025 (Expected)

Supervisor: Prof. Weisi Lin (NTU), Dr. Qiong Yan & Dr. Wenxiu Sun (Sensetime) Research Topic: Video Quality Assessment and Video Quality Understanding

Peking University, Beijing, China Bachelor of Science

Sep 2017 - June 2021

Supervisor: Assoc. Prof. Tingting Jiang (PKU)

Research Topic: Image Quality Assessment, Perceptual-oriented Super Resolution, and Image Restoration

PUBLICATIONS

Disentangling Aesthetic and Technical Effects in Video Quality Assessment of User Generated Content (Arxiv)

Haoning Wu, Liang Liao, Chaofeng Chen, Jingwen Hou, Annan Wang, Wenxiu Sun, Qiong Yan, Weisi Lin

Code: github.com/teowu/dover, Preprint: arxiv.org/abs/2011.04894

Neighbourhood Representative Sampling for Efficient End-to-end Video Quality Assessment

(Extension)

under review for IEEE Transactions on Pattern Analysis and Machine Intelligence

Haoning Wu, Chaofeng Chen, Liang Liao, Jingwen Hou, Wenxiu Sun, Qiong Yan, Jinwei Gu, Weisi Lin

FAST-VQA: Efficient End-to-End Video Quality Assessment via Fragment Sampling (Original ECCV Poster)

in Proceedings of European Conference on Computer Vision (ECCV) 2022

Haoning Wu, Chaofeng Chen, Jingwen Hou, Liang Liao, Annan Wang, Wenxiu Sun, Qiong Yan, Weisi Lin

Code: github.com/teowu/fast-vqa, ECCV: arxiv.org/abs/2007.02595, Extension: arxiv.org/abs/2010.05357

DisCoVQA: Temporal Distortion-Content Transformers for Video Quality Assessment (Transaction, IF: 5.85)

under Revision for IEEE Transactions on Circuits and Systems for Video Technology

Haoning Wu, Chaofeng Chen, Liang Liao, Jingwen Hou, Wenxiu Sun, Qiong Yan, Weisi Lin

Preprint: arxiv.org/abs/2006.09853

Exploring the Effectiveness of Video Perceptual Representation in Blind Video Quality Assessment (Oral)

in Processings of ACM International Conference on Multimedia (ACMMM) 2022

Liang Liao, Kangmin Xu, Haoning Wu, Chaofeng Chen, Wenxiu Sun, Qiong Yan, Weisi Lin

INDUSTRIAL EXPERIENCES

Sensetime Research, Beijing, China Research Intern

Jan 2022 - July 2022

Research Topic: Subjective Studies and Approaches on Image Quality Assessment on Reconstructed Portraits

Megvii Technologies, Beijing, China Research Intern

July 2020 - Apr 2021

Research Topic: Shadowed Image Restoration, Edge-refined Image Matting

RESEARCH EXPERIENCES

Spatial-Temporal Video Quality Understanding

From Aug 2021

Supervisor: Prof. Weisi Lin (NTU), Dr. Qiong Yan & Dr. Wenxiu Sun (Sensetime)

Research Specifics: Efficient and Robust Video Quality Assessment; Explainable Video Quality Evaluation;

TECHNICAL SKILLS

Pytorch user, maintainer of the first end-to-end Deep Video Quality Assessment library that supports evaluation, training, visualization, *etc* which has gained 85 stars. Also available for C++, Matlab, R, *etc*.