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EDUCATION

Nanyang Technological University, Singapore Ph.D. Candidate

Aug 2021 - Aug 2024 (Expected)

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

Peking University, Beijing, China Bachelor of Science

Sep 2017 - June 2021

Supervisor: Assoc. Prof. Tingting Jiang (PKU)

PUBLICATIONS AS FIRST AUTHOR

(c4) Towards Explainable In-the-Wild Video Quality Assessment: a Database and a Language-Prompted Approach

in Processings of ACM International Conference on Multimedia (ACMMM) 2023

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

Code&Database: github.com/VQAssessment/MaxVQA, Preprint: arxiv.org/abs/2305.12726

(c3) Exploring Video Quality Assessment of User Generated Contents from Aesthetic and Technical Perspectives

Haoning Wu*, Erli Zhang*, Liang Liao*, Chaofeng Chen, Jingwen Hou, Annan Wang, Wenxiu Sun, Qiong Yan, Weisi Lin in Proceedings of IEEE International Conference on Computer and Vision (ICCV) 2023

Code: github.com/VQAssessment/DOVER^{98*}, Preprint: arxiv.org/abs/2211.04894v3

(j3*) Towards Robust Text-Prompted Semantic Criterion for In-the-Wild Video Quality Assessment (Ext. Journal)

under review for IEEE Transactions on Image Processing

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

(c2) Exploring Opinion-unaware Video Quality Assessment with Semantic Affinity Criterion (Oral, Conference Ver.)

in Proceedings of IEEE International Conference on Multimedia and Expo (ICME) 2023

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

Code: github.com/VQAssessment/BVQI, ICME: arxiv.org/abs/2302.13269, Extension: arxiv.org/abs/2304.14672

(j2) Neighbourhood Representative Sampling for Efficient End-to-end Video Quality Assessment

(Ext. Journal)

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI, IF: 23.6)

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

(c1) FAST-VQA: Efficient End-to-End Video Quality Assessment via Fragment Sampling

(Conference Ver.)

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^{160*}, ECCV: arxiv.org/abs/2207.02595, Extension: arxiv.org/abs/2210.05357

(j1) DisCoVQA: Temporal Distortion-Content Transformers for Video Quality Assessment

(Journal)

IEEE Transactions on Circuits and Systems for Video Technology (TCSVT, IF: 8.4)

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

Code: github.com/VQAssessment/DisCoVQA, Preprint: arxiv.org/abs/2206.09853

PUBLICATIONS AS MAIN CONTRIBUTING AUTHORS

(j5)^{3rd}AGIQA-3K: An Open Database for AI-Generated Image Quality Assessment, in TCSVT, 2023

(j4)4th Towards Transparent Deep Image Aesthetics Assessment with Tag-based Content Descriptors, in TIP, 2023

(c5)^{3rd}Exploring the effectiveness of video perceptual representation in blind video quality assessment, in ACMMM, 2022

INDUSTRIAL EXPERIENCES

TikTok, Singapore Machine Learning Intern, Multi-modality Large Language Models (MLLMs)

May 2023 - Aug 2023

Sensetime Research, Beijing, China Research Intern, Portrait Image Quality Assessment

Jan 2022 - July 2022

Megvii Technologies, Beijing, China Research Intern, Image Restoration

July 2020 - Apr 2021