Wu Haoning, Teo

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EDUCATION

Nanyang Technological University, Singapore *Ph.D. Candidate* *Aug 2021 - July 2024 (Expected)*
Supervisor: Prof. Weisi Lin (NTU), Dr. Qiong Yan & Dr. Wenxiu Sun (Sensetime)
Research Topic: Multi-modality Foundation Models for Low-level Visual Perception

Peking University, Beijing, China *B.Sc., advised by Prof. Tingting Jiang* *Sep 2017 - June 2021*

RESEARCH SPOTLIGHT

(i3) **Q-Align: Teaching LMMs for Visual Scoring via Discrete Text-Defined Levels**
Project Page: `https://q-align.github.io`[37*], Preprint: *(arxiv ID) 2312.17090*
(i2) **Q-Instruct: Improving Low-level Visual Abilities for Multi-modality Foundation Models** HF DAILY@NOV. 14
Project Page: `https://github.com/Q-Future/Q-Instruct`[104*], Preprint: *(arxiv ID) 2311.06783*
(i1) **Q-Bench: A Benchmark for General-Purpose Foundation Models on Low-level Vision**
Project Page: `https://github.com/Q-Future/Q-Bench`[142*], Preprint: *(arxiv ID) 2309.14181*

PUBLICATIONS AS FIRST AUTHOR

(c4) **Towards Explainable In-the-Wild Video Quality Assessment: a Database and a Language-Prompted Approach** *(Oral)*
in Processings of ACM International Conference on Multimedia (ACMMM) 2023
Code&Database: `https://github.com/VQAssessment/MaxVQA`[45*], Preprint: *(arxiv ID) 2305.12726*

(c3) **Exploring Video Quality Assessment of User Generated Contents from Aesthetic and Technical Perspectives**
in Proceedings of IEEE International Conference on Computer and Vision (ICCV) 2023
Code: `https://github.com/VQAssessment/DOVER`[159*], Preprint: *(arxiv ID) 2211.04894*

(j3*) **Towards Robust Text-Prompted Semantic Criterion for In-the-Wild Video Quality Assessment** *(Ext. Journal of c2)*
under review for IEEE Transactions on Image Processing
Code: `https://github.com/VQAssessment/BVQI`[26*], Preprint: *(arxiv ID) 2304.14672*

(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
Code: `https://github.com/VQAssessment/BVQI`[26*], Preprint: *(arxiv ID) 2302.13269*

(j2) **Neighbourhood Representative Sampling for Efficient End-to-end Video Quality Assessment** *(Ext. Journal of c1)*
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI, IF: 23.6)
Code: `https://github.com/VQAssessment/FAST-VQA-and-FasterVQA`[192*], Preprint: *(arxiv ID) 2210.05357*

(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
Code: `https://github.com/VQAssessment/FAST-VQA-and-FasterVQA`[192*], Preprint: *(arxiv ID) 2207.02595*

(j1) **DisCoVQA: Temporal Distortion-Content Transformers for Video Quality Assessment**
IEEE Transactions on Circuits and Systems for Video Technology (TCSVT, IF: 8.4)
Code: `https://github.com/VQAssessment/DisCoVQA`, Preprint: *(arxiv ID) 2206.09853*

REVIEWING SERVICES

Journals: TPAMI, TNNLS, TIP, TCSVT, TIM, *Conferences:* CVPR, ACMMM, ICME

INDUSTRIAL EXPERIENCES

TikTok, Singapore *Research 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*