Fu-Zhao Ou
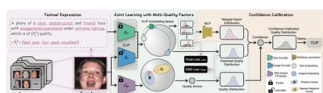Research Scholar in Department of Computer Science at City University of Hong Kong
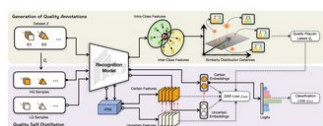
Welcome to My Homepage

I am currently a Research Scholar in Department of Computer Science at City University of Hong Kong. Previously, I served as a Researcher of Computer Vision with Shannon Laboratory at Tencent, Shenzhen, China, from 2021 to 2022. Meanwhile, from 2020 to 2021, I worked as a research intern at Youtu Laboratory, Tencent, Shanghai, China. My research focuses on image quality assessment, pattern recognition, computer vision, and artificial intelligence.
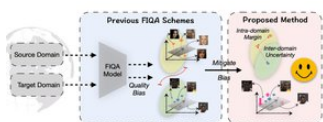
Publications

- **Fu-Zhao Ou**, Chongyi Li, Shiqi Wang, and Sam Kwong, "CLIB-FIQA: Face Image Quality Assessment with Confidence Calibration," In *Proceedings of IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, pp. 1694-1704, 2024.
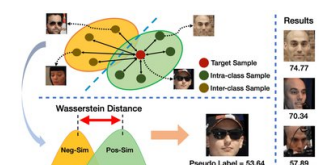 [Paper] [Code]

- **Fu-Zhao Ou**, Xingyu Chen, Kai Zhao, Shiqi Wang, Yuan-Gen Wang, and Sam Kwong, "Refining Uncertain Features with Self-Distillation for Face Recognition and Person Re-Identification," *IEEE Transactions on Multimedia (TMM)*, vol. 26, pp. 6981-6995, 2024.
  [Paper] [Code]

- **Fu-Zhao Ou**, Baoliang Chen, Chongyi Li, Shiqi Wang, and Sam Kwong, "Troubleshooting Ethnic Quality Bias with Curriculum Domain Adaptation for Face Image Quality Assessment," In *Proceedings of IEEE/CVF Conference on Computer Vision (ICCV)*, pp. 20718-20729, 2023.
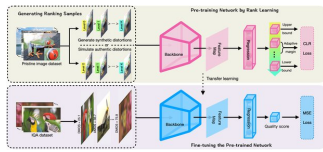 [Paper] [Code]

- **Fu-Zhao Ou**, Xingyu Chen, Ruixin Zhang, Yuge Huang, Shaoxin Li, Jilin Li, Yong Li, Liujuan Cao, and Yuan-Gen Wang, "SDD-FIQA: Unsupervised Face Image Quality Assessment with Similarity Distribution Distance," In *Proceedings of IEEE/CVF*
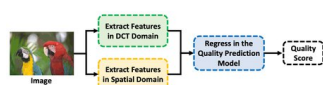
Conference on Computer Vision and Pattern Recognition (CVPR), pp. 7670-7679, 2021.
[Paper] [Code]

- **Fu-Zhao Ou**, Yuan-Gen Wang, Jin Li, Guopu Zhu, and Sam Kwong, "A Novel Rank Learning Based No-Reference Image Quality Assessment Method," *IEEE Transactions on Multimedia (TMM)*, vol. 24, pp. 4197-4211, 2022.
  [Paper] [Code]

- **Fu-Zhao Ou**, Yuan-Gen Wang, and Guopu Zhu, "A Novel Blind Image Quality Assessment Method based on Refined Natural Scene Statistics," In *Proceedings of IEEE International Conference on Image Processing (ICIP)*, pp. 1004-1008, 2019.
  [Paper] [Code]

Patents

US Patents

- Assessing Face Image Quality for Application of Facial Recognition, *US Patent*, App. 17/991,670, 2023.

International Exhibition of Inventions

- AI-based Adaptive Visual Content Enhancement, *International Exhibition of Inventions of Geneva (IEIG)*, Silver Medal, 2024.

Working Experience

Jul. 2021 – Jul. 2022 - Tencent, Shannon Lab (Shenzhen)

- Position: Researcher of Computer Vision

Mar. 2020 – Jun. 2021 - Tencent, YouTu Lab (Shanghai)

- Position: Research Intern

Talk

Nov. 2021 - Invited talk in the Workshop on Face Image Quality

- Organized by the European Association for Biometrics (EAB), National Institute of Standards and Technology (NIST), European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA), etc.

Professional Service

Journal Reviewer

- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- Electronics Letters (ELL)
- Computer Vision and Image Understanding (CVIU)

Conference Reviewer

- IEEE/CVF Conference Computer Vision and Pattern Recognition Conference (CVPR)
- IEEE/CVF International Conference on Computer Vision (ICCV)
- AAAI Conference on Artificial Intelligence (AAAI)

Teaching Task

CS1302 - Introduction to Computer Programming

- Teaching Assistant, Aug. 2022 – Jan. 2024
- Tutor, Jan. 2024 – Present

Awards

Oct. 2020 - 1st Academic Scholarship
May 2020 - Tencent Micro Innovation Award: Face-scan for WeChat Pay
Oct. 2019 - 1st Academic Scholarship