

JEG-Hybrid

Joint Effort Group

Status Update

Enrico Masala

Politecnico di Torino University, Turin, Italy

VQEG Dec 2022 Meeting

Original Mission and Current Focus

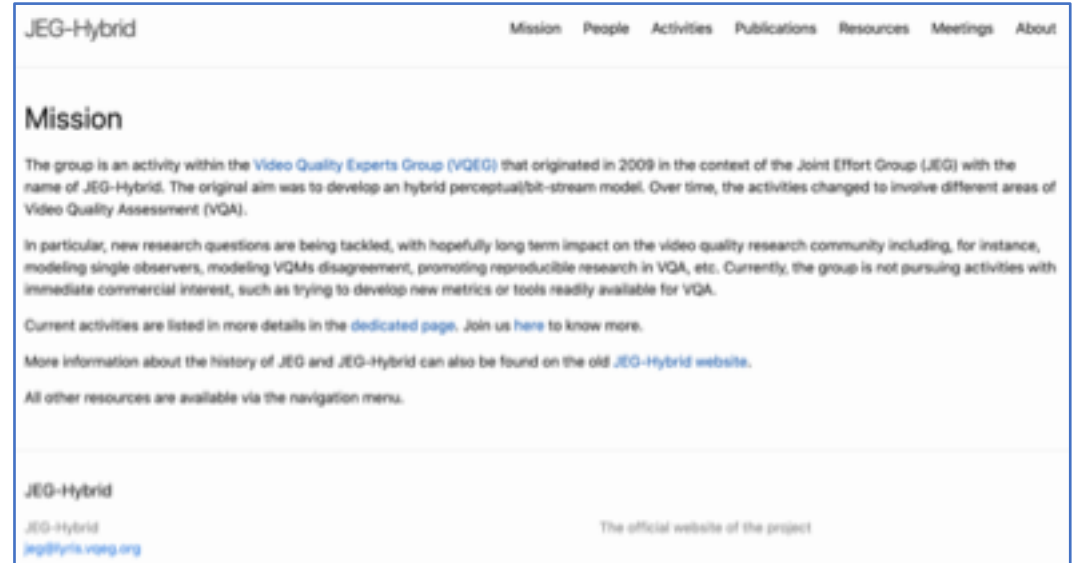
- Originally: develop a no reference Hybrid Perceptual/Bit-Stream model
 - With a small set of subjective experiments: limited training possibilities, limited validation
 - Using, e.g., a large scale dataset with 60,000+ PVS (no losses) and 500,000+ PVS with distortion due to packet losses, many full-reference objective quality measures, etc.
- Over the last few years, the activities gradually evolved over time to include several areas of Video Quality Assessment (VQA)
 - Tackling new **research questions** with hopefully **long term impact** on the video quality research community
 - Results have been presented in last VQEG meetings (in the JEG-Hybrid sessions)
 - Currently, not directly seeking the development of new metrics or tools readily available for VQA

Current Main Research Activities

- **Modeling single observers**
 - to mimic the behavior of single observers in subjective experiments (using DNNs), to investigate/understand their characteristics, and potentially to run “virtual” subjective experiments
 - this activity requires developing methods to use a low amount of subjectively annotated data for DNN training
 - Actively looking for subjectively annotated image/video datasets with single observer scores
- **How to promote reproducible research in VQA**
 - By developing methods, approaches, frameworks, tools, and guidelines
 - Currently working on a "template" for scientific publications to report on training/benchmarking of DNN-based VQMs
- More activities on the (new) JEG-Hybrid website

New Website

- We completely redesigned the website to better reflect the activities going on in the project
 - Hosted on GitHub pages for easier management and update
 - Similarly to Tools and Subjective Labs Setup website
 - Reports on current and recent **activities**, **publications**, and related **resources**
 - Old website is statically mirrored inside, to preserve history
 - Feedbacks welcome!
- <https://vqegjeg.github.io/jeg-hybrid>



Where Can I Get More Information?

- **New website** <https://vqegjeg.github.io/jeg-hybrid/>
 - Including a new up-to-date publication with immediate download link for each one
- Biweekly online meetings (next: **Jan 9, 2023, 4pm CEST**)
- How may I get involved?
 - Subscribe to the VQEG-JEG mailing list: jeg@vqeg.org
 - <http://www.its.bldrdoc.gov/vqeg/email-reflectors.aspx>
- Join our biweekly conference call