JEG-Hybrid
Joint Effort Group
Status Update

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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](https://vqegjeg.github.io/jeg-hybrid)
Where Can I Get More Information?

• **New website** [https://vqegjeg.github.io/jeg-hybrid/](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](mailto:jeg@vqeg.org)

• Join our biweekly conference call