JEG-Hybrid

Joint Effort Group on the development/research of generally applicable hybrid video quality assessment algorithms

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MISSION

- To develop a generally applicable no reference Hybrid Perceptual/Bit-Stream model
- With a small set of subjective experiments
  - Limited training possibilities
  - Limited validation
- Currently
  - Large scale DB with 60,000+ PVS (no losses) and 500,000+ PVS with distortion due to packet losses, many full-reference objective quality measures

CURRENT STATUS

- Adding the most recent version of VMAF objective measure to the large-scale DB

- Try to identify shortcomings
  - If there are none (e.g., all metrics "agree"), use full-reference metrics as ground truth
  - If there are, what set needs to be subj. evaluated ?
  - Also looking into machine-learning approaches to identify group of sequences with similar or unusual behavior on the basis of the full-reference measures

RECENT PUBLICATIONS

- Improving relevant subjective testing for validation: Comparing machine learning algorithms for finding similarities in VQA datasets using objective measures
  (Signal Processing: Image Communication, Volume 74, 2019, Pages 32-41)

- Improved Performance Measures for Video Quality Assessment Algorithms Using Training and Validation Sets
  (IEEE Transactions on Multimedia, in press, DOI: 10.1109/TMM.2018.2882091)

WHERE CAN I GET MORE INFORMATION?

- Biweekly meetings

- http://vqegjeg.intec.ugent.be/wiki/

(notably section resources, constantly updated, volunteers welcome!)

How may I get involved?

- Subscribe to the VQEG-JEG mailing list
  http://www.its.bldrdoc.gov/vqeg/email-reflectors.aspx
- Join our biweekly conference call