More Ecologically Valid Subjective Experiments
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Different Measurement Points

HVS Human Visual System

Quality of Pixels
Quality of Display?

User Experience

Quality of Experience
Examples

• HVS: How much gaussian blur must be added that you are not able to recognized a face
  • Specific lab environment
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  - Watching what a user is doing
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  • Lab or similar environment, comparing the same sources
• QoE: Which compression is best considering the current context of the user?
  • Watching what a user is doing
• UX: How to make a better product?
  • Watching what a user is doing
Experiments You Could Repeat

• ACR Without the Scale
• Your YouTube Our Lab
ACR Without the Scale

• Problem to solve:
  • We get very limited information from a tester
  • The process of selecting an answer is unknown
• Solution:
  • Thinking aloud
    • A preselected world is changed to a speech description
    • It is ok to start description seeing the video
    • We see the evolution of the scoring system
    • We see all quality dimensions
  • The rest of the experiment is the same
• Problems:
  • Data analysis is more challenging
  • We do not know if testers really say something
ACR Without the Scale The Interface

https://github.com/Qub3k/avrateNG

(which is a modified version of https://github.com/Telecommunication-Telemedia-Assessment/avrateNG)
Problem to solve:
- 10 second videos without the audio are not what a user watches
- Normally we select the content based on our preferences
- We are not forced to see the whole content

Solution:
- A rare popup with a quality question
  - A user selects the content
  - Watching makes them forget about the task
  - Real experience
- We use a standard quality scale

Problems:
- People do not just watch YouTube
- People are so much into the experience that quality is forgotten
- It is difficult to follow what is the objective quality
Your YouTube Our Lab The Interface
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