ATHENA
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BITMOVIN

Video Encoding Optimization for Live Video Streaming

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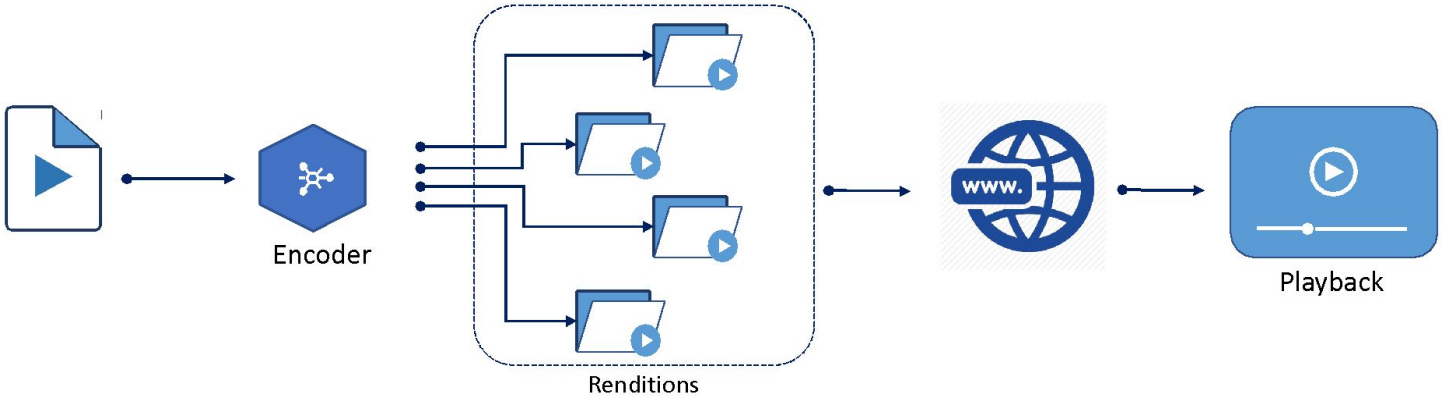
Education

- B.Sc. in Electrical Engineering
- B.Sc. in Biomedical Engineering
- M.Sc. in Electrical Engineering
- Ph.D. in Computer Science
- Postdoc since Feb 1st, 2022

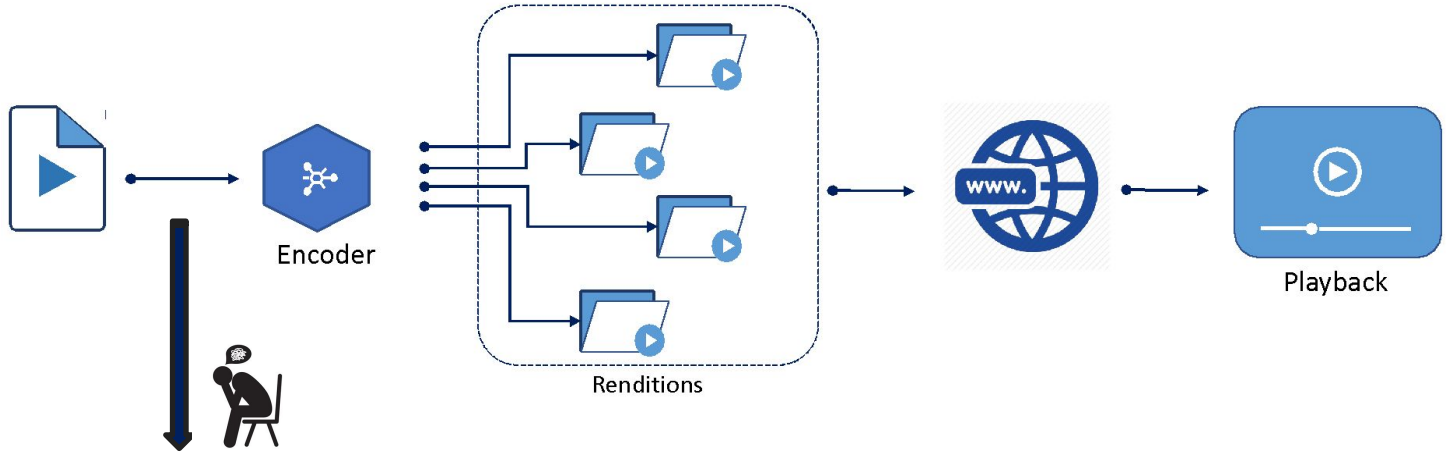
Research Interests

- Video Encoding Optimizations for Live Video Streaming
- Quality of Experience
- Immersive Media

Video Encoding Optimization for Live Video Streaming

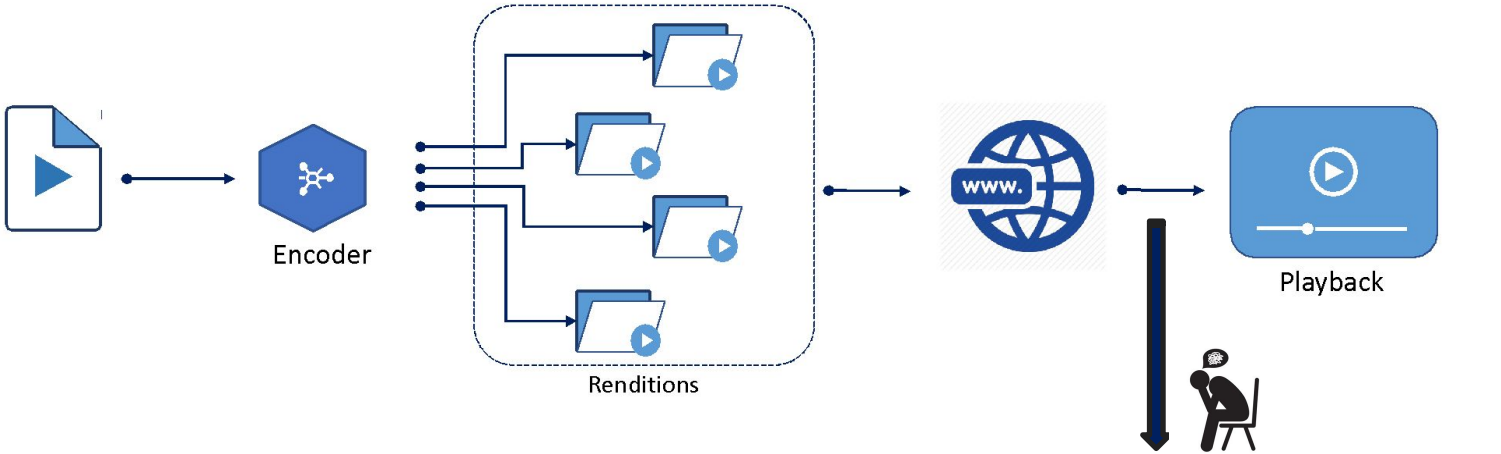


Video Encoding Optimization for Live Video Streaming



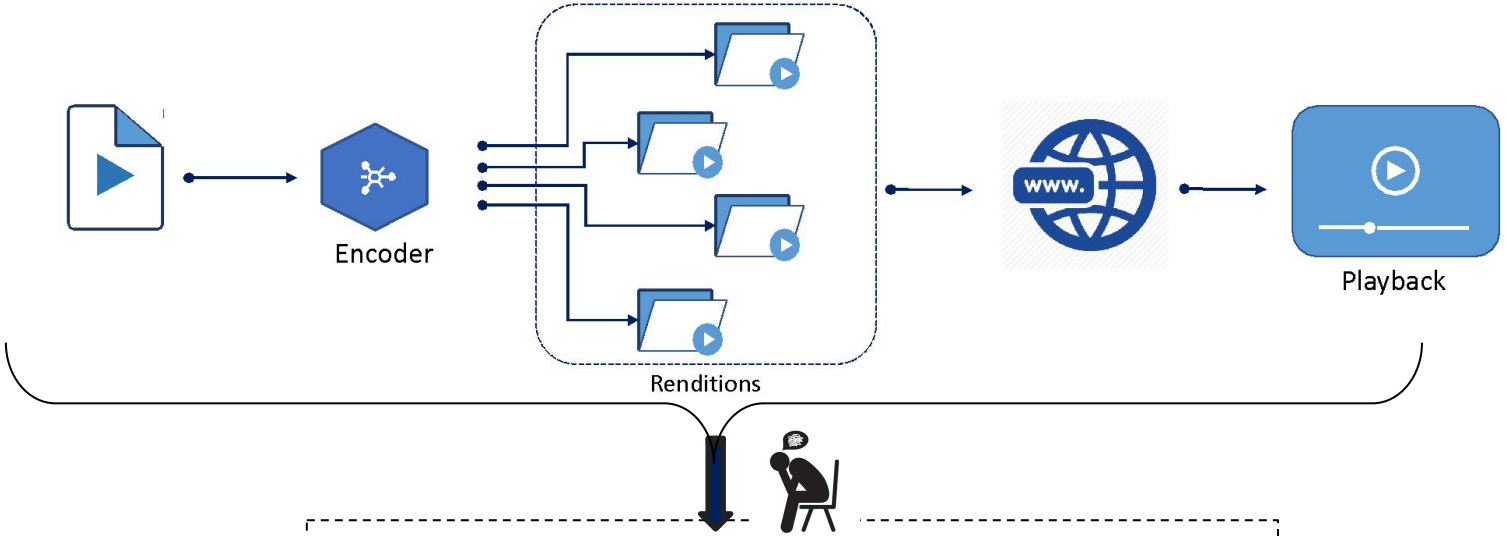
- Where to encode?
- What Bitrate Ladder to select?
- What encoding parameters to set?

Quality of Experience



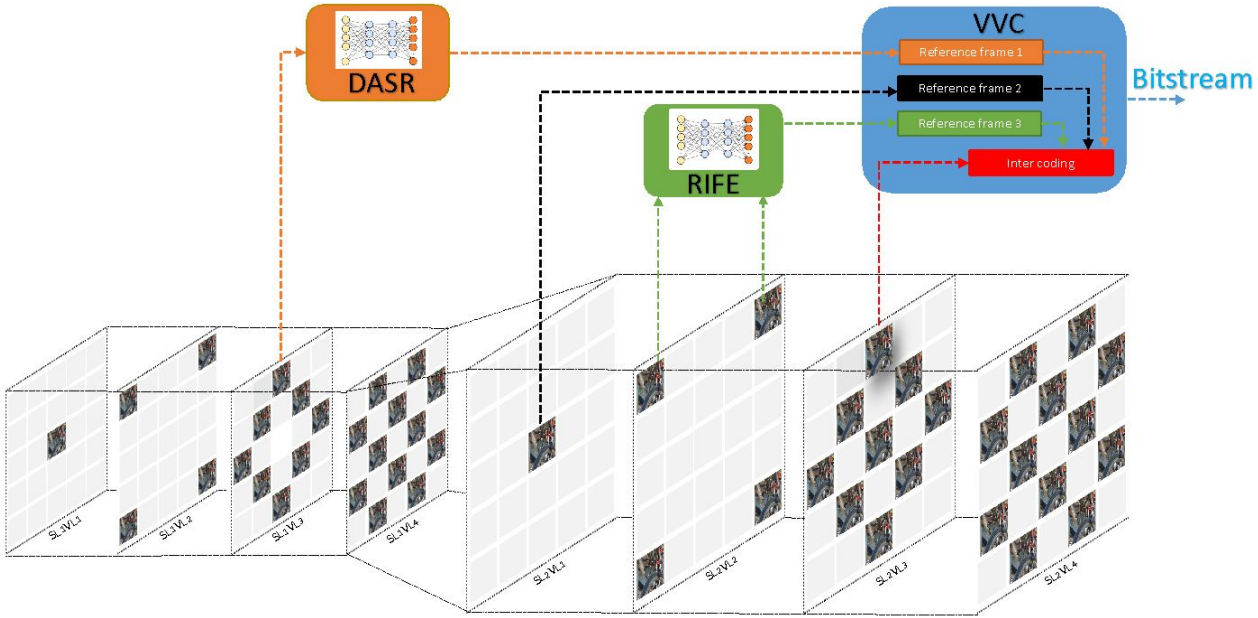
- Key factors in QoE
- LwVQM (FR, RR, NR)

End-to-End Optimization



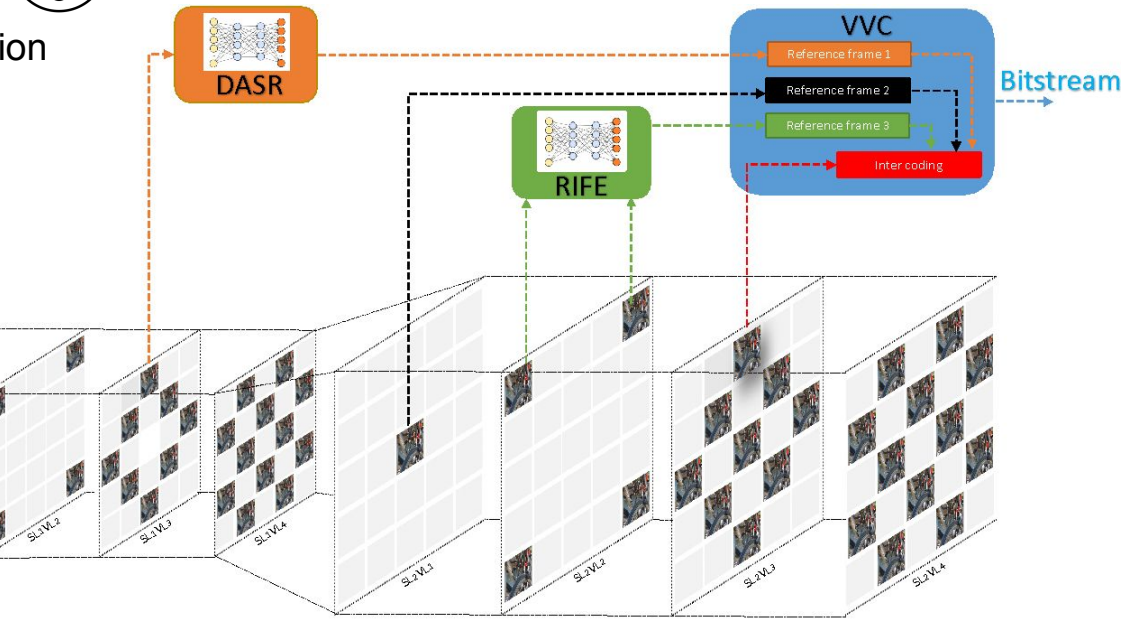
- Quality-aware (JND) per-title encoding
- Usar-aware Per-title Encoding
- Light-weight Transcoding at the Edge
- Per-device encoding

Immersive Media

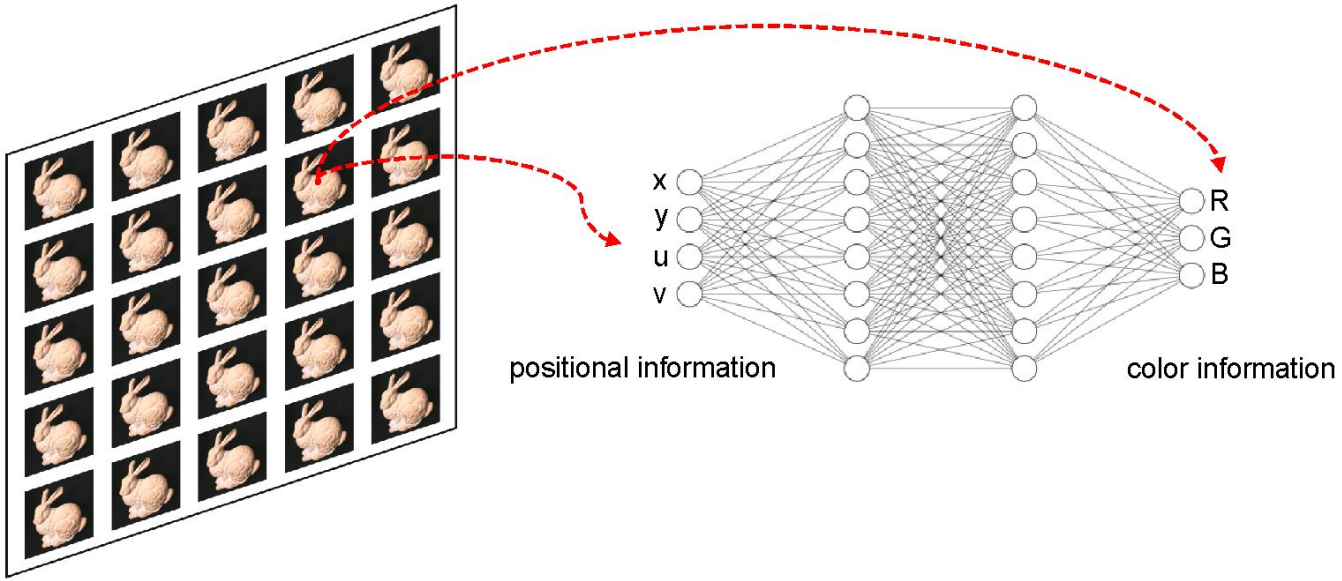


Immersive Media

- High Compression Efficiency
- Viewport Scalability
- Spatial Scalability
- Quality Scalability
- Uniform Quality Distribution
- Random Access



Immersive Media



LET`S
WORK
TOGETHER