

Foreword

Welcome to the second edition of the ACM Mile-High Video Conference (MHV/2023).

The aim of ACM MHV/2023 is to establish a unique forum for participants from both industry and academia to present, share, and discuss innovations and best practices from multimedia content production to consumption.

For the second edition of ACM MHV/2023, we received 90 submissions that have been rigorously peer-reviewed by an international program committee comprising experts from both industry and academia. ACM MHV/2023 implemented a two-step submission approach: first, an extended abstract or short paper (*i.e.*, max. one page or approx. 400 words) was submitted, followed by a second step where accepted short papers were eligible to submit a full-length paper (*i.e.*, up to six pages). Both short and long paper submissions have been peer-reviewed, resulting in 57 papers accepted for presentation at the event, and 44 papers have been included in the conference proceedings (*i.e.*, overall acceptance rate: about 48.9%).

The articles appearing in the program cover a variety of topics, including *(i)* video streaming (adaptive video encoding/streaming, networking, analytics, QUIC protocol, media processing, streaming optimization, media delivery, immersive technologies, low-latency, updates on standards, and 5G media streaming), and *(ii)* video coding (video coding standards, video codecs optimization, performance evaluations, visual quality, and QoE),

Additionally, the ACM MHV/2023 program includes

- three keynotes by a renowned expert from academia and respected industry leaders:
 - "Video Quality: A Nexus of Video Engineering and Visual Neuroscience", Alan Bovik (University of Texas at Austin),
 - "Virtual Lounge: combining XR, gaming and OTT", Mickael Raulet (Ateme),
 - "Use of AI/ML in MVPD Video Platforms", Amit Bagga (Comcast);
- four practical tutorials:
 - "DASH based media streaming with dash.js", Daniel Silhavy (Fraunhofer FOKUS),
 - "Exploring the Capabilities of ISO/BMFF (MP4)", Dimitri Podborski (Apple),
 - "Encoding and Packaging x265/HDR with FFmpeg, Bento4 and mp4box", Jan Ozer (NETINT),
 - "A hands-on tutorial for using VMAF in practice", Christos Bampis (Netflix);
- a panel on "Women in Video – Why Are We Still Talking About This?"
 - Organizer and Moderator: Florence Agboma (Senior Manager – Video Experience at Sky),
 - Panelists: Tamar Shoham (CTO at Beamr), Anne Aaron (Director of Encoding Technologies at Netflix), Victoria Tuzova (Global Business Development & Marketing Manager at Elecard), Denise Noyes (Principal Software Engineer at META);

- a panel on "AI-Based Technologies in Video Coding and Streaming: the Future Outlook"
 - Organizer and Moderator: Dan Grois (Principal Researcher at Comcast),
 - Panelists: Alan Bovik (Professor at University of Texas at Austin), Mickael Raulet (CTO at Ateame), Ishtiaq Faisal (Executive Director at Comcast), Zoe Liu (CTO at Visionular), and Jan De Cock (Director Codec Development at Synamedia);
- an Amazon technical session:
 - "How Prime Video reliably distributes live TV to millions of customers globally, while managing costs, and a technical dive into two perceptually-motivated techniques that reduce bitrate while maintaining high visual quality", Ramzi Khsib (AWS Elemental) and Ben Forman (Prime Video);
- a Comcast technical session:
 - "Comcast Use of SCTE Standards", Stuart Kurkowski (Comcast),
 - "Cable Industry Updates on Streaming Specifications & Practices", Yasser Syed (Comcast).

We would like to thank everyone who contributed to the organization of the conference: the technical program committee, steering committee, and organization team. We would also like to thank the authors, the sponsors, including ACM and SIGMM, and all of our supporters.

We hope that you enjoy this second edition of the ACM MHV conference and have fruitful discussions during the conference.

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