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PROGRAM
Data Compression Conference (DCC 2024)

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Snowbird, Utah, March 19 - March 22, 2024

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Jizheng Xu, *Bytedance Inc.*
Peng Yin, *Dolby Laboratories, Inc.*

SCHEDULE OVERVIEW (*all times U.S. Mountain Daylight Time*):

Tuesday Evening, March 19: Registration and Reception (7pm - 9pm)

Wednesday, March 20:

Morning:	Technical Sessions 1,2,3	(8:00am - 12:40pm)
Mid-Day:	Keynote Speaker	(2:00pm - 3:00pm)
Afternoon:	Technical Sessions 4,5	(3:30pm - 6:50pm)

Thursday, March 21:

Morning:	Technical Sessions 6,7,8	(8:00am - 12:40pm)
Mid-Day:	Technical Sessions 9,10	(2:00pm - 4:30pm)
Afternoon:	Poster Session and Reception	(4:45pm - 7:00pm)

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TUESDAY EVENING

Registration / Reception, 7-9pm (Golden Cliff Room)

WEDNESDAY MORNING

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Srivatsa Prativadibhayankaram[1], Mahadev Prasad Panda[1], Thomas Richter[1], Heiko Sparenberg[1], Siegfried Fößel[1], and André Kaup[2]

[1]Fraunhofer IIS, Germany; [2]Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

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[1]Orange Innovation, France; [2]IETR, France

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[1]City University of Hong Kong; [2]Bytedance Inc., USA

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[1]University of Chinese Academy of Sciences; [2]Bytedance Inc., USA

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Peking University, China

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[1]City University of Hong Kong, China; [2] Alibaba Group, China

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[1]City Univeristy of Hong Kong, China; [2]Alibaba Group, China

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WEDNESDAY MID-DAY

Keynote Speaker

2:00pm - 3:00pm

JPEG AI Standard:
Learning an Efficient and Rich Visual Data Representation

Dr. João Ascenso
Instituto Superior Técnico

The JPEG AI Learning-based Image Coding System is an ongoing joint standardisation effort between ISO, IEC and ITU-T for the development of the first image coding standard based on machine learning, offering a single stream, compact compressed domain representation, targeting both human visualisation and machine consumption. The JPEG AI aims to develop an image coding standard addressing the needs of a wide range of applications such as cloud storage, visual surveillance, autonomous vehicles and devices, image collection storage and management, live monitoring of visual data, and media distribution. This talk presents and discusses the rationale behind the JPEG AI vision, notably how this standardisation initiative aims to shape the future of image coding, providing a multi-purpose representation adequate not only for compression but also for content understanding and enhancement. The main focus will be on the JPEG AI coding engine for standard reconstruction, with particular attention paid to its distinctive features, which include context modeling, the decoupling of prediction and sample reconstruction, multi-branch decoding, and rate adaptation, among others. Moreover, this talk will analyze and discuss the JPEG AI coding engine efficiency and complexity.

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[1]Comenius University, Slovakia; [2]Ghent University, Belgium; [3]Johns Hopkins University, USA; [4]Dalhousie University, Canada; [5]University of Chile

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University of Yamanashi, Japan

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