3rd RichNediaGA ACM Multimedia 2025

3rd International Workshop on Rich Media with Generative AI

Workshop Homepage: <u>https://richmediagai.github.io</u>

Paper Submission Site: <u>https://openreview.net/group?id=acmm.org/ACMMM/2025/Workshop/RichMediaGAI</u>

Accepted papers will be published in proceedings by Sheridan Publishing on behalf of ACM

Call For Papers

Generative AI (GAI) models like VAEs, GANs and diffusion models have remarkable impacts in both academia research and industrial applications. For instance, GAI enables anyone to design and generate synthetic and realistic content without professional artistic and technical skills. This empowers immeasurable market growth for gaming and entertainment, and even more profound impacts to provide crucial simulated data for training embodied AI agents. The goal of this workshop is to showcase the latest developments of GAI for creating, editing, restoring, and compressing rich media data, such as images, videos, and 3D contents.

Interested To	opics

Representation learning

- Tokenization of rich media data





Call for Challenge Participants

The workshop features four distinct challenge tracks, focusing on media generation and transmission with GAI. Track 1~3 target reducing computation & transmission for efficient media delivery, and Track 4 targets controlled novel content creation. A large-scale multi-modality multi-view dataset, named M³VIR, is provided, featuring computer-synthesized virtual content. M³VIR further comprises two subsets, a multi-resolution subset M³VIR MR for track 1~3 and a multi-style subset M³VIR MS for track 4. The entire M³VIR dataset covers 80 scenes from 8 categories, 10 scenes in each category. The UE5 Unreal Engine is employed where for each scene a variety of videos are simulated with matching content to serve as ground-truth for the competition tasks.

Compact representation of rich media data

• Multimodal representation learning of rich media data

Restoration and compression

- Compression of rich media with generative priors
- Restoration of rich media with generative priors
- Quality enhancement of rich media with generative priors

Control and interactive editing

- Manipulation/editing of media
- Interactive editing of media content

3D geometry and material generation

- 3D geometry generation from 2D data
- Material generation from 2D data

Efficient inference of GAI models

- Efficient network architecture design of GAI models
- Simplification of GAI models
- Inference acceleration of GAI models

Important Dates

- Regular paper submission deadline: July 11, 2025
- Challenge paper submission deadline: July 11, 2025
- Challenge result submission deadline: July 25, 2025
- Notification of acceptance: August 1, 2025
- Camera-ready submission deadline: August 11, 2025

Invited Speakers



Junsong Yuan Professor University at Buffalo SUNY



Jinwei Gu

Principal Research Scientist

Adjunct Professor

Junfeng He Research Scientist Google







Senior Principal Researcher Futurewei Technologies

Dong Xu Professor University of Hong Kong



Zhenghao Chen

Assistant Professor University of NewCastle





