

# The 1st International Workshop on Generative AI and Hyper Intelligence (GAI-HyperI 2024)

<https://gai-hyperI.github.io/>

Held in conjunction with IEEE CyberSciTech 2024

November 5-8, 2024, Boracay Island, Malay, Philippines

## Aim and Scope

**Generative AI (GAI)** has seen rapid advancements and gained immense popularity in recent years. With its extensive model parameters and learning from vast datasets, generative AI is capable of creating new content, such as text, images, music, and videos, which were once considered exclusive to human creativity. Popular generative AI including Large Language Models (LLMs) and Generative Adversarial Networks (GANs) have demonstrated remarkable capabilities in conversation systems and image generation. The creativity and adaptivity of generative AI are essential for the development of Hyper Intelligence.

**Hyper Intelligence (HyperI)** is an emerging interdisciplinary field focused on achieving super-intelligent abilities to tackle complex tasks. It involves the study of hyper-connections, hyper-compositions, hyper-collaborations, and hyper-cognition among intelligent entities. Hyper-intelligent systems are increasingly prevalent in various applications, such as smart transportation, intelligent healthcare, and personalized education. However, the rise of these systems presents numerous challenges, including theoretical and framework development, security and safety concerns, and issues related to human interaction and personalization. We believe that generative AI can enable hyper-intelligent systems to devise innovative and adaptive solutions to handle the above challenges.

This workshop aims to investigate both theoretical foundations and practical applications to address emerging challenges and opportunities in Hyper Intelligence. We welcome researchers to discuss and examine ongoing research on Hyper Intelligence by leveraging Generative AI.

**Topics of interest include, but are not limited to:**

- ✧ Techniques for efficient application of generative AI
- ✧ Emerging capabilities and trends of generative AI
- ✧ Interpretable and explainable generative AI models
- ✧ Emotional AI and personalized generative intelligence
- ✧ Creative HCI/BCI facilitated by generative AI
- ✧ Application of generative AI including images, music, text, design, and motion
- ✧ Frameworks and methods for hyper-intelligence
- ✧ Hybrid collective systems for hyper-intelligence
- ✧ Hyper-connections and hyper-collaborations
- ✧ Hyper-cognition and adaptive intelligence systems
- ✧ Security and safety in hyper-intelligent systems
- ✧ Ethical issues, including misuses and abuses, provenance, copyright, bias, and diversity

## Submission and Publication

Please follow the guideline in IEEE CyberSciTech 2024 Submission Web Site to submit your work via EDAS (<https://edas.info/N32365>).

The submitted papers should be 4-6 pages long including figures and references, and prepared in IEEE CS Proceedings format.

IEEE formatting info: [http://www.ieee.org/conferences\\_events/conferences/publishing/templates.html](http://www.ieee.org/conferences_events/conferences/publishing/templates.html)

We also welcome **Position Statement Papers** (2-4 pages), which present novel ideas, hypotheses, and emerging research directions in Generative AI and Hyper Intelligence. These papers will be peer-reviewed for novelty and impact.

At least one of the authors of the accepted paper is requested to register and present the paper at the conference.

All accepted papers will be published in an IEEE Computer Society proceedings (IEEE-DL and EI indexed).

## Brainstorming Session

We are pleased to host a special brainstorming session to promote creative discussions and collaborations among participants. This session will provide a platform for sharing ideas and exploring new research directions in Generative AI and Hyper Intelligence. Participants are encouraged to bring forward innovative concepts and challenging questions to stimulate lively and productive exchanges.

## Important Dates

*Submission Deadline* July 15, 2024  
*Acceptance Notifications* August 25, 2024  
*Camera-ready Submission* September 15, 2024

## Organizers

**General Chair:** Jianhua Ma, Hosei University, Japan ([jianhua@hosei.ac.jp](mailto:jianhua@hosei.ac.jp))

**Program Chair:** Ao Guo, Nagoya University, Japan ([guo.ao.i6@f.mail.nagoya-u.ac.jp](mailto:guo.ao.i6@f.mail.nagoya-u.ac.jp))

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