

# **The 16th International Conference on Genetic and Evolutionary Computing (ICGEC-2024)**

August 28-29, 2024, Miyazaki, Japan

## **Special Session on Digital Transformation Technologies and Artificial Computing in Life Science: Exploring the Next Frontier**

**Organizers:** Prof. Thi Thi Zin and Prof. Hiromisu Hama

This session aims to explore the **next frontier in the intersection of digital transformation technologies, artificial computing, and life science.**

In this rapidly evolving world, a new era of intelligence is emerging, with Artificial Intelligence (AI) leading the way. Alongside the advancements in Digital Transformation (DX) technologies, AI is reshaping our lives and driving profound changes that will shape the future. This invited session will delve into the cutting-edge advancements in digital transformation technologies and artificial computing, focusing on their impact on the field of life science. The session will cover a wide range of topics that highlight the transformative potential of these technologies in life science research and application. From computational modeling and simulation to data analytics and machine learning, the session will showcase how these technologies enable researchers to gain deeper insights, accelerate discoveries, and drive innovation in critical areas such as genomics, drug discovery, personalized medicine, and healthcare delivery.

We invite researchers, academicians, industry professionals, and practitioners to submit their original research papers related to the following topics of interest, although submissions covering other relevant areas are also encouraged. Authors are encouraged to present their novel research, methodologies, case studies, and applications that showcase the potential, challenges, and future directions of leveraging digital transformation and artificial computing to unlock new possibilities in life science research and application.

### **Topics of interest include but are not limited to the following:**

1. Imaging Technologies and Application,
2. Artificial Intelligence and Cutting Edge Technologies and their Applications,
3. Information and Communication Technology and Its Application to Life Science,
4. Image Processing Techniques and Applications,
5. Internet of Things and Data Science,
6. Medical Imaging,
7. Mathematical and Statistical Modeling,
8. Machine Learning and Applications,
9. Advanced Digital Transformation Technologies and Applications,
10. Dairy Science and Smart Farming

**Submissions:**

Papers should follow the template announced on the official ICGEC-2024 conference website (<https://icgec24.github.io/>) and be submitted via email to session organizer Prof. Thi Thi Zin (organizer) at ([thithi@cc.miyazaki-u.ac.jp](mailto:thithi@cc.miyazaki-u.ac.jp))

**Conference Proceeding Information:**

The conference proceedings will be published in the book series of Lecture Notes in Electrical Engineering by Springer. Normally, papers in this series are indexed by EI and Scopus.

**Important Dates:** (If ICGEC-2024 extends the dates, follow those dates announced on the website)

Paper submission deadline: **May 31, 2024**

Acceptance notification: **June 10, 2024**

Camera-ready paper due: **June 17, 2024**

Early bird registration: **June 17, 2024**

We look forward to receiving your submissions and to engaging in insightful discussions at the 16th International Conference on Genetic and Evolutionary Computing (ICGEC-2024) in Miyazaki, Japan. Together, let's explore the next frontier in digital transformation and artificial computing in life science!

**For more information:**

Please visit the ICGEC-2024 official websites <https://icgec24.github.io/> or contact the organizers of this invited session:

Thi Thi Zin, Ph.D.

Professor,

Information and Communication Technology Program

Faculty of Engineering, University of Miyazaki

Miyazaki, Japan

Tel. & Fax: (81)985-58-7411

Email: [thithi@cc.miyazaki-u.ac.jp](mailto:thithi@cc.miyazaki-u.ac.jp)