



**CALL FOR PAPERS  
SPECIAL SESSION ON**

**Generative Adversarial Networks (GAN) for Intelligent System analysis, upgrading and diagnostic**

**for ICCAD'23**

**May 10-12, 2023, Rome-Italy**

**Session Co-Chairs:**

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**Session description:**

The emergence of Deep Generative Adversarial Networks GANs in recent years have revolutionized the generation of synthetic images linking the success of Deep Learning to medical applications and other bases image applications by increasing the available datasets, or replacing them altogether, circumventing the aforementioned concerns related to the data security and availability. GANs are bases on two antagonist models, a Generator and a discriminator both used to contribute to for example to create a new data samples thus equilibrating a given data base, hoping to increase the performance of a subsequent discriminator of classification deep model.

Although, the usage of GANs has been extensively used for 2D image applications, other types of data such as time series, 3d or higher dimensional data have less known documented applications. The goal, therefore, is to investigate the usage of GANs, alone and with the collaboration of other deep learning architectures for a wide range of applications including 1D, 2D and 3D datasets for analysis, upgrading and diagnostic.

The topics of interest include, but are not limited to:

- Deep Generative Networks GANs and applications
- Unbalanced data sets analysis and upgrading using GANs
- Data recovery using GANs
- Generation of new data using GANs

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**SUBMISSION**

Papers must be submitted electronically for peer review by: **January 31, 2023**

[Submission – ICCAD 2023 \(iccad-conf.com\)](http://iccad-conf.com)

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).