

Call for Contributions

1. Inform the Chair: with the title of your contribution

2. Submission URL: <https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICN+2024+Special>

Please select Track Preference as **GANS**

3. Note: *For 2024, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.*

Special track

GANS: Generative AI for Network Security

Chair

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along with

ICN 2024: The Twenty-Third International Conference on Networks

<https://www.iaria.org/conferences2024/ICN24.html>

May 26 - 30, 2024 - Barcelona, Spain

Generative AI is a type of machine learning that uses a neural network to generate new data based on patterns learned from existing data. In the context of network security, generative AI can be used to analyze network traffic and identify anomalies that may indicate the presence of an attacker or malicious activity.

Generative AI in network security involves using models like GANs to simulate realistic cyber threats and enhance various security aspects. It aids in generating synthetic data for training machine learning models, simulating adversarial attacks, and evaluating the effectiveness of security systems. This technology supports anomaly detection by learning and identifying deviations from normal network behavior, assisting in early threat detection. Additionally, generative models contribute to vulnerability analysis, behavioral analysis, and dynamic threat intelligence, providing a comprehensive approach to strengthening network security measures.

This special track on generative AI and network security emphasizes on the tools, techniques, and methods that are adopted to enhance a network security system by minimizing the human effort in monitoring network security incidents, and also aim to help researchers come up with new technologies on how network security and anomaly detection errors and false positives can be reduced using generative AI.

Suitable research topics for this special track include, but are not limited to, the following areas:

- AI and anomaly detection
- Autonomous penetration testing
- Vulnerability analysis using AI
- Network security management
- Security policy conflict detection.
- Threat intelligence.
- AI and big data analysis for network security
- AI and security of software defined systems
- Generative AI and network traffic analysis

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaia.org]
- Presentations: slide only [slide-deck posted on www.iaia.org]
- Demos: two pages [posted on www.iaia.org]

Important Datelines

Inform the Chair or Coordinator: As soon as you decide to contribute

- Contribution submission: April 10
- Acceptance notification: April 28
- Registration: May 8
- Camera-ready: May 8

Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chairs.

Paper Format

- See: <http://www.iaia.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaia.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the Open Access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iaiasubmit.org/conferences/submit/newcontribution.php?event=ICN+2024+Special>

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

Contact

Chair

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