

The 3rd International Workshop on Graph-based Network Security (GraSec 2022) will be held in conjunction with the IEEE/IFIP Network Operations and Management Symposium (NOMS) in Budapest, Hungary, 25-29 April 2022.

The workshop serves to bring together people from industry and academia including researchers, developers, and practitioners from a variety of fields working on graphs and their applications in cybersecurity and network management. Moreover, the workshop allows attendees to share and discuss their latest findings from both theoretical and practical perspectives in several techniques and methods for graph modeling, mining, learning, and visualizing. The main goal of GraSec is to present research and experience in the application of graph theory and graph-based approached to data analytics in network security and forensics, network management and traffic analysis, and related fields.

TPC CO-CHAIRS

Martin Husák (Masaryk University, Czech Republic)
Hamida Seba (LIRIS, University of Lyon, France)

TPC Members

- □ Sofiane Lagraa, University of Luxembourg, Luxembourg
- □ Fabian Böhm, University of Regensburg, Germany
- Cristina Alcaraz, University of Malaga, Spain
- Pavol Sokol, Pavol Jozef Šafárik University in Košice, Slovakia
- Milan Čermák, Masaryk University, Czech Republic
- □ Pierre Parrend, EPITA/University of Strasbourg, France
- Amani Abou Rida, University of Strasbourg, France
- □ Erisa Karafili, University of Southampton, UK

IMPORTANT DATES

- Paper Submission Deadline:
- January 23, 2022
- Notification of Acceptance: February 27, 2022
- □ Submission of Camera-ready Version: March 13, 2022
- Conference Date: 25-29 April 2022

WEB

https://grasec.uni.lu

CONTACT US

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TOPICS OF INTEREST

Authors are invited to submit papers that fall into or are related to one or multiple topic areas listed below:

- Graph-based intrusion detection and botnet activity detection,
- Graph-based anomaly detection for network security and management,
- □ Attack graphs modeling and application, graph-based threat assessment,
- Graph-based models for network modeling and situational awareness,
- Graph-based approaches to network traffic analysis and forensics,
- Graph application in access controls, security policies,
- □ Autoencoders and representation learning for graphs,
- Graph embedding techniques for network security and management,
- Graph databases and graph-based tools for big data analysis in network management,
- □ Parallel algorithms for dynamic and big graph analysis on HPC systems,
- Graph sampling and summarizing techniques,
- □ Visualization of dynamic and large-scale graphs/networks,
- □ Novel applications of graphs in network security and management.

PAPER SUBMISSION AND FORMAT

Paper submissions must present original, unpublished research, development, or experiences. Each submission must be written in English, accompanied by a 50 to 200 words abstract that clearly outlines the scope and contributions of the paper. Self-plagiarized papers will be rejected without further review. Authors should submit their papers via JEMS: https://jems.sbc.org.br/

There is a length limitation of **6 pages** (including title, abstract, all figures, tables, and references) for **regular papers**, and **4 pages** for **short papers** describing work in progress. Submissions must be in **IEEE 2-column** style.

ACCEPTED PAPERS AND PROCEEDINGS

Accepted **regular papers** will have a 30 minutes oral presentation (including 10-minute Q&A) at assigned time slot. Accepted **short papers** will have a 20 minutes oral presentation (including 5-minute Q&A).

Papers accepted for GraSec will be included in the IFIP/IEEE NOMS conference proceedings. IFIP and IEEE reserve the right to remove any paper from the IFIP database and IEEE Xplore if the paper is not presented at the workshop.