Preface: international workshop on applied intelligent security systems in law enforcement

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Abstract

This document is the preface of the International Workshop on Applied Intelligent Security Systems in Law Enforcement (AISSLE-2025), October, 30–31, 2025, held in Vinnytsia, Ukraine (https://univd.edu.ua/en/conference/view/119). The main purpose of the International Workshop on Applied Intelligent Security Systems in Law Enforcement (AISSLE-2025) is to bring together specialists in intelligent security systems to address the cyber police and law enforcement agencies needs and to discuss current methods for detecting and preventing cyber threats in real time. The event's objectives include exchanging practical experience with artificial intelligence and machine learning algorithms and Big Data technologies for monitoring network traffic, detecting anomalies in user behavior, and improving biometric authentication, as well as analysing and optimising hardware and software system operation through applied modeling and digital twins.

Keywords

applied intelligent security systems, artificial intelligence, machine learning, intelligent information systems data sciences, law enforcement intelligent systems

1. Introduction

International Workshop on Applied Intelligent Security Systems in Law Enforcement (AISSLE-2025) aims to bring together specialists in the field of intelligent security systems for the cyber police and law enforcement agency's needs, as well as discuss current methods for detecting and preventing cyber threats in real time. The event objectives include exchanging practical experience in the artificial intelligence and machine learning algorithms and Big Data technologies used for monitoring network traffic, anomalies in user behavior, and biometric authentication, as well as analyzing and optimizing the hardware and software systems operation through applied modeling and digital twins. The AISSLE-2025 Workshop is soliciting literature review, survey and research papers comments including, whilst not limited to, the following areas of interest:

- Applied Intelligent Security Systems;
- Artificial Intelligence and Machine Learning;
- Applied Modeling in Security Systems;
- Big Data and Data Science;

- Intelligent Information Systems, Data Mining and Ontology;
- Computational Intelligence for Data Acquisition Systems;
- Design and Testing of Advanced Computer Systems;
- Autoencoders and Generative Models;
- Intelligent Software Systems and Tools;
- Text Mining;
- Social Media Analytics;
- Multi-criteria Decision Analysis and Decision Support Systems;
- Law enforcement intelligent systems;
- Internet of Things;
- Risk-based analysis models in cybersecurity.

The language of International Workshop on Applied Intelligent Security Systems in Law Enforcement (AISSLE-2025) is English.

The International Workshop on Applied Intelligent Security Systems in Law Enforcement (AISSLE-2025) took the form of oral presentation by peer-reviewed individual papers. The papers were distributed among 17 external reviewers from The United States of America, Sweden, Czech Republic, Greece, Slovak Republic, India, Poland and Ukraine.

The Organizing Committee received 33 submissions, out of which 21 were accepted for presentation as a regular paper. These papers were published in the International Workshop on Applied Intelligent Security Systems in Law Enforcement (AISSLE-2025) proceedings.

2. Acknowledgements

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