

Lecture Notes in Networks and Systems

Volume 556

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Novel & Intelligent Digital Systems: Proceedings of the 2nd International Conference (NiDS 2022)

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Preface

The 2nd International Conference on **Novel & Intelligent Digital Systems** (NiDS2022) was held in Athens, Greece, from September 29 to 30, 2022. The conference was implemented virtually due to COVID-19, under the auspices of the Institute of Intelligent Systems (IIS). The Hosting Institution of NiDS2022 was the University of West Attica (Greece).

NiDS lays special emphasis on the novelties of intelligent systems and on the interdisciplinary research for enabling, supporting and promoting artificial intelligence (AI) in software development. It promotes high-quality research, creating a forum for exploration of challenges and novel advancements in AI. It triggers an exchange of ideas in this field, reinforcing and expanding the network of researchers, academics and market representatives.

NiDS addresses experts/researchers and scholars in the fields of artificial and computational intelligence in systems, as well as computer science in general, enabling them to learn more about pertinent fields, which are strongly related and mutually complementary.

Topics within the scope of NiDS series include but are not limited to:

- Adaptive systems
- Affective computing
- Augmented reality
- Big data
- Bioinformatics
- Cloud computing
- Cognitive systems
- Collaborative learning
- Cybersecurity
- Data analytics
- Data mining and knowledge extraction
- Decision-making systems
- Deep learning
- Digital marketing

Digital technology
Distance learning
E-commerce
Educational data mining
E-learning
Environmental informatics
Expert systems
Fuzzy systems
Genetic algorithm applications
Human-machine interaction
Information retrieval
Intelligent information systems
Intelligent modeling
Machine learning
Medical informatics
Mobile computing
Multi-agent systems
Natural language processing
Neural networks
Pattern recognition
Personalized systems and services
Pervasive multimedia systems
Recommender systems
Reinforcement learning
Semantic web applications
Sentiment analysis
Serious gaming
Smart cities
Smart grid
Social media applications
Social network analytics
Text mining
Ubiquitous computing
User modeling
Virtual reality
Web intelligence

The call for scientific papers solicited work presenting substantive new research results in using advanced computer technologies and interdisciplinary research for enabling, supporting and enhancing intelligent systems.

The international program committee consisted of 52 leading members of the intelligent systems community, as well as highly promising younger researchers. The conference (General) chairs were Cleo Sgouropoulou and Ioannis Voyatzis from University of West Attica (Greece), whereas the program committee chairs were Akrivi Krouska and Christos Troussas from University of West Attica and

Jaime Caro from University of the Philippines. The keynote speaker of NiDS 2022 was Prof. Mirjana Ivanovic, a full professor at Faculty of Sciences, University of Novi Sad, Serbia. The title of her speech was “How Artificial Intelligent Approaches Support Medical Decisions and Patients’ Wellbeing”.

Scientific papers were reviewed rigorously by two to three reviewers (one of which was senior) through a double-blind process, thus reflecting our commitment to make NiDS a top-flight, selective and high-quality conference. We believe that the chosen full papers describe some very significant research, while the short papers present some very interesting new ideas. In the review process, the reviewers’ evaluations were generally respected. The management of the review process and the preparation of the proceedings were handled through EasyChair.

We would like to thank all those who have contributed to the conference, the authors, the program committee members and the organization committee with its chair, Kitty Panourgia, as well as the Institute of Intelligent Systems.

Akrivi Krouska
Christos Troussas
Jaime Caro

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The conference is held under the auspices of the Institute of Intelligent Systems.



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