# Special Issue on Applied Informatics

Gergely Kovásznai and Imre Varga

IN TODAY'S dynamic and ever-evolving digital landscape, applied informatics plays a pivotal role in shaping the future of technology. From refining algorithms for enhanced data analysis to optimizing communication networks and advancing artificial intelligence, the realm of applied informatics continues to drive innovation and transformation across industries. This current Special Issue features contributions from the 12th International Conference on Applied Informatics (ICAI 2023), which was held in Eger, Hungary on March 2-4, 2023. These research papers explore novel insights, innovative methodologies, and practical applications within the field of computer science and informatics. Each of them represents a valuable contribution to the applied informatics field and offers insights that bridge the gap between theory and practical application. They are a testament to the diversity and dynamism of our field, showcasing a wide range of research topics and applications.

The ICAI Conference series is traditionally held in Eger in every 3 years, and is jointly organized by the Eszterházy Károly Catholic University and the University of Debrecen. The conference is oriented towards professional exchange of ideas in the field of Applied Informatics, covering areas such as Artificial Intelligence, Formal Methods, Computer Networks, Data Visualisation and more. The goal of the conference is to provide a forum for the discussion of academic research and industry.
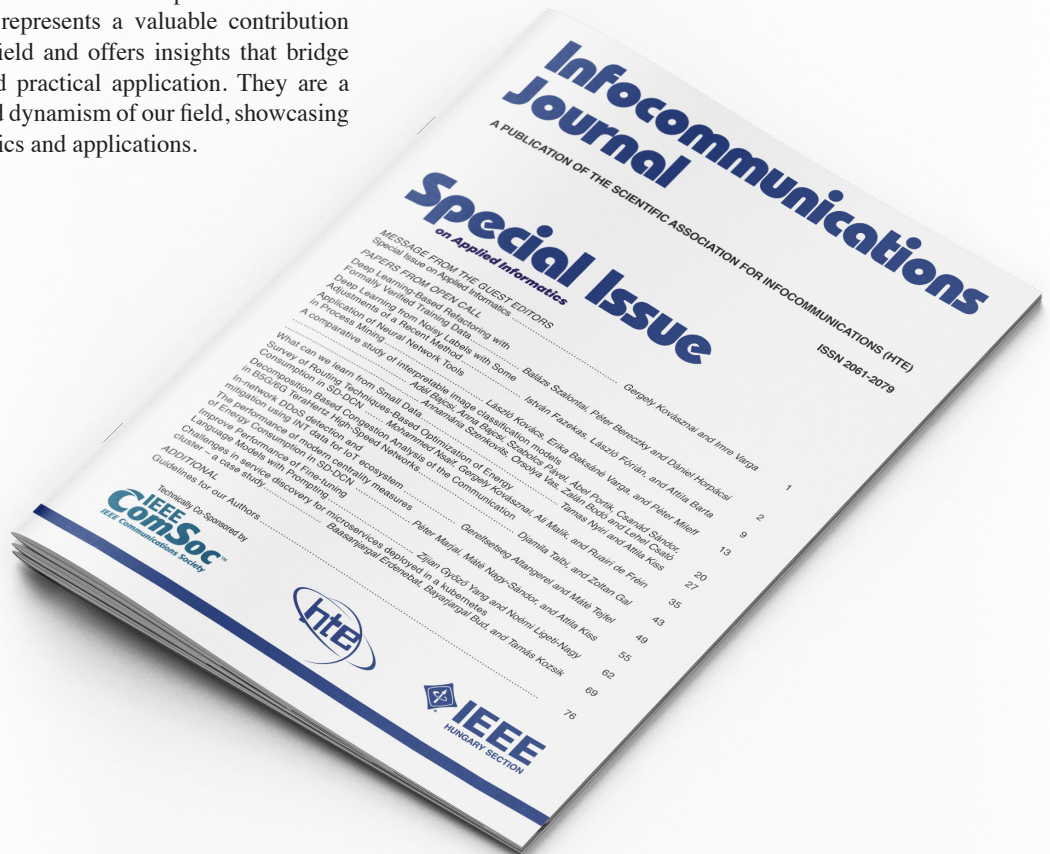
Gergely Kovásznai is an Associate Professor and Head of the Department of Computational Science at the Eszterházy Károly Catholic University in Eger, Hungary. He received his Ph.D. degree in Formal Methods and Automated Theorem Proving from the University of Debrecen, Hungary, in 2007. Over the years, he worked as a research fellow at the Aristotle University of Thessaloniki, Greece, at the Johannes Kepler University Linz, Austria, and at the Vienna University of Technology, Austria. His research interests include formal methods, formal verification, operations research, and machine learning.

Imre Varga was born in Hajdúböszörmény, Hungary, in 1979. He received M.Sc. degree in physics and informatics teaching from the University of Debrecen, in 2002 and Ph.D. degree in physics also from the University of Debrecen, in 2008.
He has been working at the University of Debrecen since 2002. Now he is an associate professor at the Faculty of Informatics. Imre has been the head of the Department of Informatics Systems and Networks since 2018. He has several journal conference papers in the field of complex systems. His research interests include structure formation, fracture of granular materials, study of complex networks and information spreading on them by the tools of computer simulation.