EDITORIAL: SMART CITIES RESEARCH FUTURE MOBILITY, FUTURE INFRASTRUCTURE, FUTURE PLACES FOR LIVING, FUTURE EDUCATION

Lectori benevolo salutem,

in this editorial, we discuss and present the current and future trends of research on smart cities in connection with the sixth Smart Sustainable and Safe Cities Conference and in the framework of 'MEC_N-141290' Scientific Research program for the promotion of leading-edge technologies and future science as open science.

Outstanding researchers of the Doctoral School on Safety and Security Sciences at Óbuda University and of NextTechnologies Ltd. Complex Systems Research Institute have been able to go beyond the traditional disciplinary approach and conduct real research. The authors show how to develop future tasks based on real community needs independently, by applying the skills in a synergistic and creative manner.

In this way, the sharp borderline between separate disciplines is disappearing and the project-oriented approach necessary for practical tasks is generating new disciplines and new knowledge. The research results of the Doctoral School on Safety and Security Sciences presented in this thematic issue of the INDECS journal include the following papers:

In their article *SMEs' Perceptions of the Use of Cloud Services*, **Bak** and **Reicher** highlight the relevance of cloud computing today, and give an overview of the latest studies on SMEs.

The article titled *Cyber Security Analysis of Smart Buildings from a Cyber Security Architecture Point of ivew* by **Sándor and Rajnai** presents the basic features of the emerging cyber security contents of smart buildings.

The next article *Digital Education; Governments Strategies, Teaching Tools in the EU and the Case Study of Digital Transformation in Budapest* by **Altaleb**, **Shatnawi** and **Rajnai** evaluates and analyzes e-learning and distance education in terms of threats, challenges, opportunities, strengths, and weaknesses.

According to the research on energy security, reliability, availability, accessibility, and resilience presented by **Molnár** in the article *Smart Solutions for Securing the Power Supply of Smart Cities*. a fragile balance of city infrastructures will need to be maintained to operate future smart cities.

Part of the research topic of social engineering is presented in the article titled *The Role of Social Engineering in the Energy Balance of Systems* by **Albininé Budavári**, **Albini** and **Mester**. The study examines the harmful energy role of social engineering through the parallels between the regulatory circuit of the control theory and the operating model of social engineering. The result of the study highlights the importance of cyber defence.

The article *The Role of Additional Information in the Control System* by **Albininé Budavári** and **Rajnai** examines the efficiency of system control. The basis of the study is the energetic background of the control theory cybernetic loop model. The study models the impact of sampling efficiency across the entire cybernetic loop. Modeling the role of additional information in the cybernetic loop has shown that the presence of additional information generates unnecessary energy consumption.

In the article *Autonomous Vehicles from Another Perspective - a Literature Analysis* by **Berek**, some research trends on self-driving cars are presented. The bibliometric analysis included an overview of publications on self-driving cars by year and by country. A more detailed analysis of the publication output of the last six years is also included and it shows that Asia is making significant efforts in the field of self-driving cars.

The article *Internet of Things (IOT) in Self-Driving Cars Environment* by **Bautista** and **Mester** presents how the Internet of Things technologies can drastically improve the capabilities of the autonomous vehicle to better understand its environment with the interconnection of the surrounding elements. The development of the Internet of Things in autonomous cars has resulted in more intelligent mobility with higher levels of safety, efficiency and sustainability.

The article titled *Underestimated Factors in the Adoption of Self-Driving Cars* by **Zilahy** focuses on the factors that have been underestimated in the adoption of self-driving cars. In the future, companies wishing to promote self-driving cars should use social media to describe self-driving in a way that is as clear and simple as possible. The controllability of vehicles should also be communicated.

In their article named *Methodological and Health Reasons for Unsuccessful Biometric Identification,* **Pallagi** and **Persely** examine the main causes of failed biometric identification procedures through examples.

Guaranteeing safety represents a serious issue in smart cities and it has become one of the pillars of a smart city.

These studies connect to cutting-edge smart cities research, and they can be successfully implemented in various areas of developing sustainable and safe communities all over the world. This work is connected to the project and the results of the international collaboration in promoting science, and it is a good example of supporting community science.

All the presented articles provide the careful studies of the problems, and the editors believe that the whole issue is a very interesting read.

Cordially,

Budapest, 21st March 2023

Guest editors:

Dániel Tokody and Gyula Mester