INTERNATIONAL SCIENTIFIC CONFERENCE

EMERGE 2022
DIGITAL SOCIETY NOW
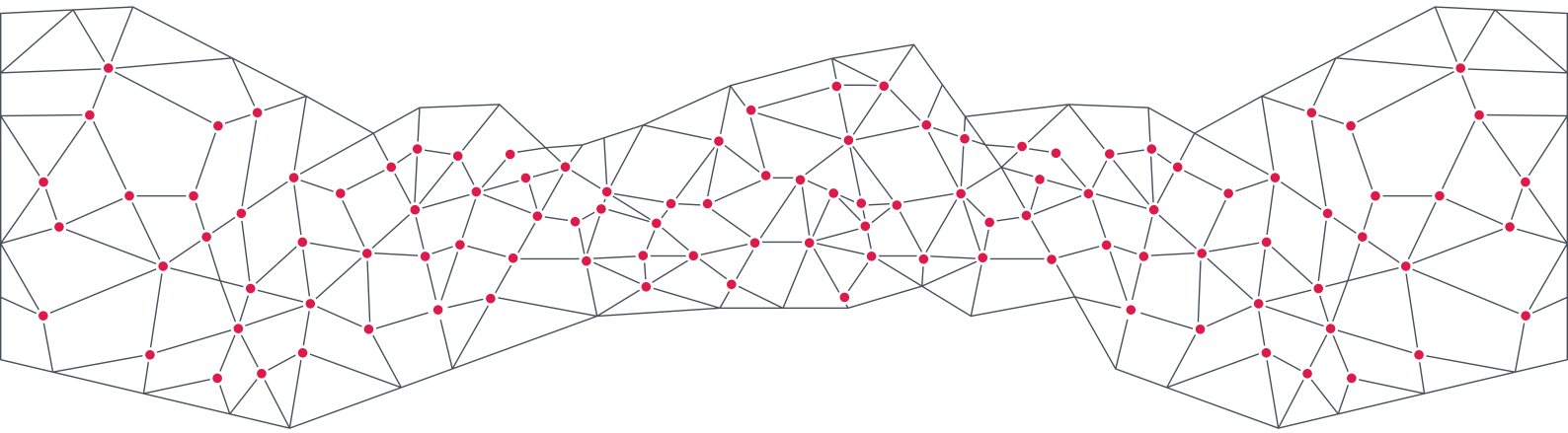
DIGITAL SOCIETY NOW

International Scientific Conference

Digital Society Now
EMERGE 2022

16th December
Dorcol Platz, Belgrade

DigiLab: Digital Society Laboratory,
Institute for Philosophy and Social Theory

The American University of Paris

Universität Wien

CONTENTS

Digital Society Now

Emerging technologies have brought about ground-breaking changes to societies across the globe. Leading global regulators are struggling to keep up with technological development and impose new rules and regulations. Our choices and habits, personal freedoms, human rights, and power relations are being fundamentally transformed through our constant interaction with and reliance on technology. The development of autonomous vehicles, military drones, and other types of AI systems opens up significant questions in the domains of ethics and law.

In interacting with media such as news content, ads, and search engine results, citizens are exposed to algorithmic decisions by AI-based recommendation systems on an individual level and are subjected to echo chambers, misinformation, and personal data misuse by big tech and third parties. Freedom of speech and regulation of social media have been the battlefields of leading global tech corporations.

New markets are constantly being opened by the creative industry sector propelled by the evolution of digital technologies. This has become a sector of strategic importance. New apps are being developed on multiple platforms, offering additional functionalities and transforming the needs and habits of digital consumers. The fusion of creativity, art, advertising, and start-up culture has become a driving force of creative economy growth across the world.

Immersive virtual spaces are being introduced under the umbrella term Metaverse designated as an open and shared sum of all virtual reality spaces (worlds). The shift to the virtual realm has been significantly accelerated by the COVID-19 pandemic, climate change, and military conflicts around the world. Major corporations are investing billions to create a new market that will transport our daily activities, such as shopping, work, leisure, entertainment, and socialization, into the virtual realm.

Beyond its use in cryptocurrencies, blockchain technology has promising potential in handling misinformation and fake news and therefore could serve the purpose of regaining trust in online news media. At the same time, blockchain technology has a very significant environmental impact, it is vulnerable to cyberattacks, and any information stored on it (including, for example, child pornography) cannot be corrected or erased.

The fast pace of technological development is followed by the development of posthumanist concepts, shedding light on implants, cognitive enhancement, bio-hacking, and other emergent technologies. EMERGE 2022 seeks both specific and broad perspectives on current technological advancements. As Nick Montfort wrote in his exploration of the concept of the future, our goal should be consciously trying to contribute to future-making rather than anticipating and predicting the future.

The conference is part of the EMERGE an annual event organised by the Digital Society Lab of the Institute for Philosophy and Social Theory, University of Belgrade. Its goal is to connect actors from the tech industry, policy makers, and academic researchers in discussing the social and economic impact of emerging technologies. EMERGE 2022 consists of the EMERGE Forum on The Future of AI driven Humanity and the International Scientific Conference on Digital Society Now taking place in Belgrade, Serbia and online, 16–18 December 2022.

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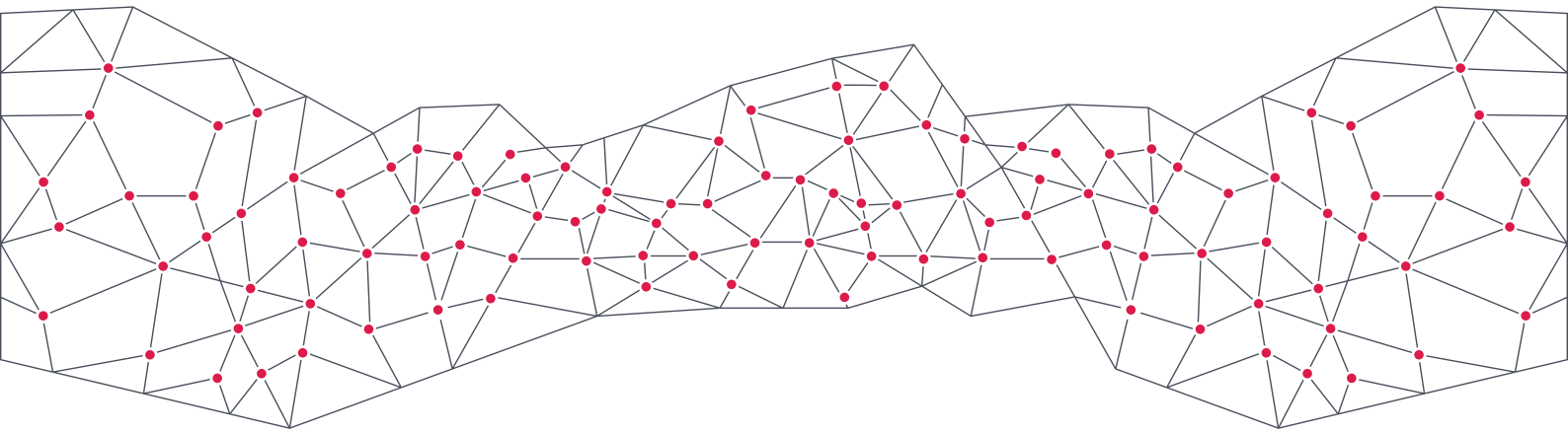**Evi Sampanikou**, University of Aegean, Greece
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CYBER ORDER

Cyber security culture from the perspective of social cognitive theory: a case study of the COVID-19 pandemic

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The subject of this paper is considering the potential of cyber security culture research within the framework of Social Cognitive Theory (SCT), in the context of cyber security culture research during the COVID-19 pandemic. Due to the accelerated technological development and especially the intensified and widespread application of information technologies in business and everyday life, the question of security in cyberspace is rightfully being considered more and more often. The COVID-19 pandemic has further stimulated interest in the field of cyber security, due to the transformation of work, education and other activities, which have taken root in the online sphere to a significant extent. Therefore, general functioning at this level of technological development necessarily carries the risk of cyber threats. This also applies when it comes to personal entertainment on social networks, but also the functioning of critical infrastructure, which is impossible without the Internet and a complex system of electronic communication connections (e.g. healthcare facilities, energy plants, banks, traffic infrastructure, etc). In this sense, security culture represents an important prevention strategy, but also strategy for dealing with cyber security threats. Hence, this paper adopts an approach to cyber security culture, based on the model of reciprocal determinism (derived from SCT), which implies the interdependence of three key elements: organizational, psychological and behavioral. The aim is to use the case of the COVID-19 pandemic to examine the relevance of this approach in the cyber security culture research. In other words, the increase in vulnerability to cyber threats during the COVID-19 pandemic and consequently, the expansion of research on cyber and information security, provided the basis for the pandemic to serve as a case study to test the hypothesis of the possibility of grouping various indicators of cyber security culture under the three key elements offered by the reciprocal determinism model. In a methodological sense, the paper will be based on academic literature review, i.e. the content analysis of relevant research on cyber security culture in the context of the COVID-19 pandemic, in order to identify key indicators used in the assessment of cyber security culture. Then, the identified indicators will be classified according to three key elements of reciprocal determinism model. This will provide an overview of those studies, which, although they did not explicitly use this model, could, according to their general approach, be classified as those that take a social-cognitive approach in the cyber security culture research. The expected contribution of this paper would be reflected in the enrichment of the already existing corpus of cyber security culture indicators (according to the triad - organizational, psychological, behavioral), as well as in the argumentation of the potential of social cognitive theory in the cyber security culture research, but also security culture in general.

Keywords: cybersecurity, cybersecurityculture, socialcognitivetheory, reciprocaldeterminism, COVID-19

Slađana Ćurčić is a research assistant at the Institute of European Studies and a PhD student at the Faculty of Security Studies University of Belgrade, where she also completed undergraduate and master academic studies. The main areas of her academic interest are security culture and security of youth, EU strategic culture, human security, health security, as well as democratic governance of the security sector. During her studies, she was engaged as a researcher in centers at the Faculty of Security Studies (Human Security Research Center, Center for Applied Security) and as an intern at the Belgrade Center for Security Policy. Also, she worked as a teaching assistant at the Faculty of Security Studies, Department of Security Studies. Currently, as an external associate, she participates in the project Gender, climate and security: Why is it important to include climate change in the new NAP 1325 in Serbia?, which conducts the Public Policy Research Center and supports the OSCE Mission to Serbia. She published several scientific articles in top scientific journals of national importance, in prominent national journals, in thematic proceeding book of national importance as well as international conference proceeding book.

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