

SOFA 2020

9TH INTERNATIONAL WORKSHOP ON SOFT COMPUTING APPLICATIONS
27-29 NOV-2020 ARAD, ROMANIA

Special Session: Classification of Emergent Digital Behavior and Misbehavior for Digital Behavior Change Interventions (DBCIs),

Assoc.Prof. PhD Dana Rad

Faculty of Educational Sciences, Psychology and Social Sciences

Aurel Vlaicu University of Arad, Romania

Scope and topics:

The aim of this special session is to motivating researchers from academia, non-governmental organizations, freelancers, industry, and individuals to addressing the underlying challenges of emergent digital behaviors and misbehaviors classification with a direct impact on **Digital Behavior Change Interventions (DBCIs)** by presenting novel techniques, experimental results, or theoretical approaches involving intelligent systems.

Digital culture has deeply influenced our social, economic, political, and cultural system, characterized by fast and constant technological transition, as people are increasingly interconnected and compelled to reject the past paradigms. It has the potential to turn power relations and interactions from institutions of centralized and hierarchical control to systems of more flexible and independent power. Emergent behavior is the behavior of a system that does not depend on its components, but on its relationships with each other. Thus, the emergent behavior cannot be determined by the analysis of the individual parts of the system. It can only be anticipated, regulated or operated by knowing the components and their relationship. The main argument for why the emergent behavior becomes difficult to predict resides in the fact that the interactional pattern between systems' elements increases exponentially along with the amount of new input, allowing for a myriad of novel and latent behavioural patterns to emerge. Emergence is considered often to be the outcome of specific interactional patterns. Validation of emergent behavior involves an analysis of behavioural information and the circumstances under which it occurs. Digital emergent behavior refers to the set of behaviors that are occurring under the direct

SOFA 2020

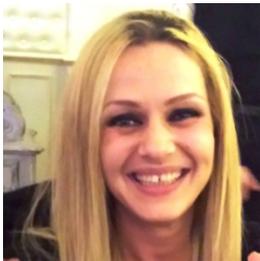
9TH INTERNATIONAL WORKSHOP ON SOFT COMPUTING APPLICATIONS
27-29 NOV-2020 ARAD, ROMANIA

interaction between people and technology. Commitment to health interventions is a requirement for efficiency, this being of vital importance to Digital Behavior Change Interventions (DBCIs), meaning interventions that utilize emerging internet technology.

For this session we seek original, unpunished contributions that are mainly focused on, but not necessarily limited to, the following topics:

- Case studies on Digital Behavior Change Interventions (DBCIs),
- Computational Statistics in the classification of digital behaviors,
- Response surface methodology in analyzing digital behaviors,
- Fuzzy Logic in predicting digital misbehavior.

Special Session Organizer:



Dana Rad, PhD. is Associate Professor in the Faculty of Educational Sciences, Psychology and Social Sciences at **Aurel Vlaicu University of Arad**, Romania. She holds a double specialization in Psychology (*PhD* in Cognitive Applied Psychology) and Automation (*MD* in Automation and Intelligent Systems).

Email: dana@xhouse.ro