

TITLE: Influence of Artificial Intelligence on Personalized Medical Predictions, Interventions and Quality of Life Issues

ABSTRACT: Enormous rapid development of Information Communication Technologies (ICT) essentially and immensely changed human society and everyday life. Life in modern, highly developed societies almost has been completely changed especially in last decade influenced by technological and scientific innovations.

On the other hand, recently, there is a growing need to support and supply continuous healthcare monitoring and to offer numerous reliable services that make life easier for different kinds of patients.

Throughout everyday routine patient's activities can be observed using mobile, smart, wearable devices. Collected different types of complex data must be aggregated, processed, analyzed in order to support proper decision making to increase patient's wellbeing.

Techniques and methods of artificial intelligence (AI), data mining (DM), and machine learning (ML) offer the opportunity to analyze big data, consume them, and derive new knowledge and values. Such new health insights in the human's/patient's states can help in making adequate predictions and propose interventions to help them in increasing quality of life issues.

This talk will give an overview, opportunities and challenges of current state and characteristic application of AI and ML in medical domains with particular attention to personalized services.

Biography:

Mirjana Ivanovic holds the position of Full Professor at Faculty of Sciences, University of Novi Sad, Serbia. She is a member of the University Council for Informatics. She is author or co-author of 14 textbooks, several monographs and more than 450 research papers, most of which are published in international journals and conferences. Her research interests include agent technologies, intelligent techniques, applications of data mining and machine learning techniques in medical domains, technology enhanced learning. She is/was a member of Program Committees of more than 250 international conferences, Program/General Chair of several international conferences, and leader of numerous international research projects. Mirjana Ivanovic delivered several keynote speeches at international conferences and visited numerous academic institutions all over the world as visiting researcher (Germany, Australia, China, Korea). Currently she is Editor-in-Chief of the Computer Science and Information Systems journal. (e-mail: mira@dmi.uns.ac.rs).

