## Human-Machine Speech Communication X & Y vs. Z & α Generation

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Professor Vlado Delić will give the invited talk about Human-machine speech communication.

## Short description:

Human-machine speech communication is an area of artificial intelligence based on machine learning. Recent advances in automatic speech recognition and text-to-speech synthesis based on deep neural networks have enabled dialog systems in a number of languages, including South Slavic. The experience of touchscreen and speech communication with smart devices are something new generations (Z &  $\alpha$ ) grow up with. It is much easier and more natural for Gen Z to engage in speech communication with devices in their environment than previous generations (X & Y-Millennials), so it is very important that they can do so in their own language. Speech technologies, unlike other new technologies, are language dependent and must be developed extensively for each language.

The lecture will present the achievements in the development of speech technologies for South Slavic languages and will look at perspectives of human-machine speech communication in the near and far future, especially for different generations of people who grow up with different experiences in communication with people and things.

## More about Vlado Delić:

Vlado Delić is a full professor at the University of Novi Sad, Faculty of Technical Sciences, and the head of the Chair of Communication Engineering and Signal Processing. Prof. Delić has created distinguished curricula in acoustics, audio engineering and speech technologies at UNS. His research interests include audio signal processing and human-machine spoken dialogue systems. He has been leading major national and international research projects in the field of speech technologies in Serbia.

His main professional contribution is the establishment and leadership of the most prominent R&D group in the field of speech technologies in South Slavic languages within a Centre of Excellence at FTS. Their results include voice portals and digital assistants, assistive technologies for the disabled, website readers, voice dial systems, etc. The main results are published in nearly 300 scientific papers and applied in several patents and innovations in the region. For his contribution to innovations, Prof. Delić has received several prestigious awards.