

AVVISO DI SEMINARIO

Social network analysis: network science and machine learning meet psychology

Prof. Tomaso Erseghe

*Department of Information Engineering
University of Padova
Italy*

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Abstract: The study of text from a socio-psychological perspective requires deep interdisciplinary interaction between different knowledges. In this seminar we will learn the current techniques that allow extracting meaningful analytics from texts, starting from the construction of semantic network, unveiling the challenging problem of identifying the topics discussed, approaching methods to extract reliable linguistic socio-psychological markers from the text (e.g., sentiment, but many other exist). Tools ranging from network science, machine learning, and social psychology will be introduced, analysed, and discussed, showing an interesting link with many concepts available from information theory.

Short Bio

Tomaso Erseghe is an Associate Professor at the University of Padova Italy since 2017. He received the Laurea degree with honours and the Ph.D. degree in Telecommunication Engineering from the University of Padova in 1996 and 2002, respectively. From 1997 to 1999 he was with Snell & Wilcox R&D Department working on video standard conversion and video archive restoration. From 2002 and until 2017 he was an Assistant Professor at the University of Padova. His research interests cover network science and machine learning applied to natural language processing, in a close interdisciplinary collaboration with the Dept. of Psychology. He also worked on distributed algorithms, the alternating direction method of multipliers, coding in the finite block-length regime, smart grid optimization, ultra-wideband transmission systems design, spectral analysis of complex modulation formats, fractional Fourier transforms and their applications, image processing and compression.