Invitation to guest talk

Machine Learning Applied in Learning Analytics

by Dr Dorin Stanciu (TU Klausenburg, Rumänien)

Wednesday, January 29th, 18:15-19:45, room Leo13-1305

How ready are Learning Sciences to take on Data Science? How can we reconcile our classical way of building understanding of the world with the black boxes of machine learning? Are existing methods of research exclusive or complementary with respect to the new computational-based methods? What are the main trends today in the newly born Learning Analytics field? Is it all about Big Data and predicting trends, or can it be used viably as a new approach to scientific research? Can we apply Learning Analytics to all subject matters and to all areas of scientific inquiries, or only to some? Who are the main pioneers in the field and how does their vision set the agenda?

While I dare to argue that we are rather far from drawing conclusions, there are several trends that appear to set the agenda. First, the digital instrumentation of learning or, more specifically, the technological scaffolding and scripting of learning, as it is coined here, at LMU, appears more and more as a must, rather than an option. Second, in a more naïve and perhaps a bit emphatic approach, there is no field that comes closer in terms of complexity than Learning Sciences. The latent or implicit nature of its constructs, as well as its rich implications for science and society, make Learning Sciences the ideal ground for using the tremendous power of Machine Learning and Artificial Intelligence. If there is one conclusion that I allow myself, I dare to say that Learning Analytics is not only a possible and very promising future, but also a very stringent present.

Dorin Stanciu is a psychologist with two PhD degrees, in Psychology (within the cognitive paradigm) and in Educational Sciences, and a post-graduate degree in informatics (all from the Babeș-Bolyai University, Cluj-Napoca). In addition, he holds a master degree in Public Administration (from the KDI School of Management and Public Policy, Seoul, South Korea). Currently, he works as an associate professor (conferentiar) at the Technical University of Cluj-Napoca (Klausenburg), Romania.

In research and teaching, he focuses on cyberpsychology and human interactions with technology (HCI, human factors, user-centered design, usability and user experience, acceptance and adoption of educational technology, technology-enhanced self-regulated learning). With respect to empirical research methods, he has strong roots in the classical inferential and Bayesian statistics, while developing applications of machine learning and crisp set/fuzzy set qualitative comparative analysis (csQCA/fsQCA) for Learning Analytics.