The Multimedia Computing Group cordially invites you to a

Music Information Retrieval morning seminar Wednesday, May 15, Social Data Lab, 9.30-11.15 h

9.30-10.15 h Modelling EEG with Deep Learning Techniques Prof. Sebastian Stober Otto von Guericke University Magdeburg, Germany

The Artificial Intelligence Lab at the Otto von Guericke University Magdeburg is dedicated to improving the cognitive abilities of machines and reducing the friction in human-machine interaction. We investigate novel signal processing and deep learning algorithms for

the analysis of sensory data and investigate human-centric approaches to interacting with machines such as speech, EEG or eye tracking. This opens up richer communication channels to remedy the interface bottleneck between human and machine and introduces feedback mechanisms that make communication more robust. By bridging the fields cognitive science and deep learning, we also develop novel techniques for analyzing deep artificial neural networks. In this talk, I will specifically cover our work on representation learning for electroencephalography (EEG) - ranging from the OpenMIIR initiative for studying music perception and imagination to our recent experiments on hybrid modelling of human and machine cognition.

10.30-11.15 h Locally-focused Music Recommendation Dr. Doug Turnbull Ithaca College, NY, USA

There are talented musicians all around us. They play amazing live shows at small venues in every city all around the world. Yet music services like Spotify, Apple Music, YouTube, and Deezer do a poor job

of helping listeners discover these artists for a variety of commercial and technical reasons. In this talk, I will discuss my recent efforts to use recommender systems to support locallyfocused music discovery. First, I will provide a brief introduction to recommender systems, the long-tail consumption models, and popularity bias. I'll then describe how we can adapt typical recommender system algorithms to be better at recommending local (long-tail) music. Finally, I will describe a personalized Internet radio project called MegsRadio.fm, why it failed after years of dedicated development, and how lessons learned are being incorporated into the design of my next project called Localify.org.



