

### **RESEARCH SEMINAR**

# In The Quest of The Ultimate Signature of Human Learning in Learning Analytics



#### Prof. Dragan Gašević

Distinguished Professor of Learning Analytics Faculty of Information Technology Monash University Australia

Date : 21 June 2023 (Wed) Time : 3:00 pm - 4:00 pm Venue : FJ304

## Abstract

Learning analytics is a field that was formed with the promise of harnessing large amounts of digital data and artificial intelligence to advance our understanding of and optimize human learning. Often, learning analytics is associated with the goal that it can recognize the signature of human learning that can offer large degree of personalized support for human learning. To achieve this ambitious goal, researchers have developed numerous predictive models based on some of the state of art techniques in deep learning. This work resulted in studies demonstrating promising prediction reliability that underpinned the development of early warning systems and success stories in student retention across different education levels. However, issues of limited generalizability, actionable insights, and biased predictions have commonly been reported. This talk will first provide a summary of existing research to illustrate some of these limitations. The talk will then discuss directions that aim to improve quality of data, enhance interpretability, and advance modeling of human learning processes. The key takeaway message from this talk is that computational approaches of learning analytics need to be deeply integrated with educational research to deliver on the promises of learning analytics.

## **About the Speaker**

Prof. Dragan Gašević is Distinguished Professor of Learning Analytics and Director of Research in the Department of Human Centred Computing of the Faculty of Information Technology and the Director of the Centre for Learning Analytics at Monash University. Prof. Gašević's research interests center around data analytic, AI, and design methods that can advance understanding of self-regulated and collaborative learning. He is a founder and served as the President (2015-2017) of the Society for Learning Analytics Research (SoLAR). He has also held several honorary appointments in Asia, Australia, Europe, and North America. He is a recipient of the Life-time Member Award (2022) as the highest distinction of the SoLAR and a Distinguished Member (2022) of the Association for Computing Machinery (ACM). In 2019-2022, he was recognized as the national field leader in educational technology in The Australian's Research Magazine that is published annually. He led the EU-funded SHEILA project that received the Best Research Project of the Year Award (2019) from the Association for Learning Technology.

