UNIVERSITÉ DE FRIBOURG
UNIVERSITÄT FREIBURG

DEPARTEMENT D'INFORMATIQUE
DEPARTEMENT FÜR INFORMATIK

INFORMATICS COLLOQUIUM

Speaker:

Prof. Dr. Koen Vanhoof, University Hasselt, Belgium

On Fuzzy Cognitive Maps and its Applications

Abstract:
Fuzzy Cognitive Maps (FCMs) are a type of recurrent neural network that consists of neural concepts and causal relations. FCMs allow decision-makers to analyze the interdependencies and causal relationships between different variables in a system, and also allow researchers and practitioners to classify, simulate and predict.
FCMs are useful for building more interpretable models than most state-of-the-art models. But it is also a fact that the interpretability of FCMs causes, as a counterpart, relatively higher errors than other models. In this lecture recent improvements that increase the accuracy and keep the explain ability are shown and explained.
The work to present has been a collaboration with researchers from Hasselt University (Belgium), Tilburg university (Netherlands) and Universidad Central Marta Abreu de Las Villas (Cuba).

Bio:
Prof. Dr. Koen Vanhoof is project leader of the Business informatics research group at Hasselt University Belgium. His major research interests are in the areas of data mining, statistics, knowledge engineering and modeling, computational intelligence methods, decision support systems, process modeling, process mining and soft computing. The application domains are information management,
marketing and finance, mobility and traffic safety, logistics. He has authored and/or co-authored over 200 peer-reviewed journal articles, about 8 book chapters and over 100 conference papers. Currently he is responsible for the courses Business Intelligence, Business process modeling and Knowledge discovery management. Prof. Dr. Koen Vanhoof has been guest-lecturer at different universities all over the world.

Date and time:	*Tuesday,* ***October 29th, 2024****, 11.00 am.*
Location:	*Pérolles 21, room E040, Bd de Pérolles 90, Fribourg*
Contact person:	*Prof. Edy Portmann*

The colloquium is free and open to the public.