TOPIC	Type reduction in interval type-2 fuzzy system
ORGANIZERS	Student Leadership Council and Faculty of ACIT Institute and TECHLAV Center
AREA	Machine Learning, Transfer Learning, Fuzzy Systems
SPEAKER	Syed Salaken
DATE	Friday January 27, 2017
TIME	3:00 – 4:00 P.M. (EST)
VENUE	Fort IRC 410, North Carolina A&T State University, UTSA and SIPI will be joining through video-conferencing
FEES	No Charge

SYNOPSIS

Institute for Intelligent Systems Research and Innovation (IISRI) is a multi-disciplinary research center at Deakin University, Australia focusing on haptics, robotics, systems modelling and machine learning systems. During the first part of this talk, a few recent achievements showcasing the ongoing works at IISRI will be shared.

In the second part, I will be talking about type reduction of interval type-2 fuzzy systems (IT2FS). As IT2FSs have shown superior performance over type-1 systems in many different fields including control systems, it is important to improve the performance of IT2FS in terms of efficiency and computational cost. Type reduction and finding the centroid shoulders are iterative operations in the IT2FS and create a bottleneck in the process of improving computational efficiency. In this talk, I will discuss the possible ways to perform type reduction and discuss my published articles on this topic. In addition to these, I will also talk about transfer learning, which is a subfield of machine learning dealing with utilizing knowledge from a different domain, and the potential applications of transfer learning.

ABOUT THE SPEAKER

Syed Salaken is a PhD student at the Institute for Intelligent Systems Research and Innovation, Deakin University, Australia. His research interest includes Machine Learning, Transfer Learning, Fuzzy Systems, Deep Learning and Data Mining. He has published multiple papers in type reduction algorithms of interval type-2 fuzzy systems and has hands-on experience in developing big data tools, handling massive amount of data and finding patterns from them.