



8th June 2023

14:20 – 14:35

Speaker: Lisa Koutsoviti Koumeri

Title: Measuring bias in tabular data in the context of pattern classification problems

There is an increasing amount of research that attempts to prove that data can encode societal biases. When biased data are used to train automated decision-making systems, the resulting decisions replicate and even enhance discrimination. Defining and measuring bias is highly context-dependent, therefore, more than twenty different definitions of bias and their respective measures have been created. Two prominent categories of bias metrics reflect either group or individual fairness, the former referring to treating different groups similarly based on a 'protected' characteristic such as ethnicity or gender, and the latter to treating similar individuals similarly irrespective of the group they belong to. In this talk, we will present several widely cited bias metrics and compare them within the context of a pattern classification case study using tabular data. Our goal is to highlight that existing measures do not align and that choosing the appropriate metric is highly context dependent.