
KALEB RUSCITTI, University of Waterloo
Modifying Mapper for Temporal Topic Modelling

In this talk, I will discuss how the Mapper algorithm can be used to model the evolution of topics in a corpus of documents over time. Many real-world corpora have document publication frequency that varies locally in semantic space, and this makes it difficult to select appropriate parameters for Mapper. I will describe my proposed modification of Mapper that removes the assumption of a single resolution scale across semantic space and improves the robustness of the results under change of parameters, as well as how this improves Mapper's utility for temporal topic modelling of real-world datasets.