

Abstract

Statistics and Machine Learning have undoubtedly proved to be useful in tackling problems in a variety of application areas including social science, public health, environmental science, media, or transportation. While these two scientific disciplines share a great number of tools, they have some fundamental differences. Nevertheless, the synergies between them provide a promising avenue in delivering truly useful, explainable and efficient methodologies that can be used in impactful problems. In this talk I aim to show such examples from my research. The first concerns the recent pandemic - one of the biggest challenges we had to face as humanity. Secondly, I will talk about approaches for modelling data arising in a social science context with particular focus on crime data.