

Presentation title:

## Using big data, artificial intelligence and cloud technologies for interactive crime mapping

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Crime occurrences involve distinct space and time characteristics and, when similar, they can be mapped as hot areas and clusters. The most common crime maps continue to be static pictures which makes it difficult for a reader to explore dynamics easily. This study aims to develop a cloud based interactive web platform using geospatial technologies for crime mapping. Additionally, to demonstrate the power of data integration through such a tool, social media information will be scraped and processed and insights about crime and disorder will be added to the interactive map. Various machine learning and artificial intelligence techniques will be used for extracting meaningful insights from social media data (text analysis, image recognition, fuzzy location extraction). Geospatial mapping and statistics will be applied to create hot areas and clusters for both crime occurrences and crime related social media posts which can then be assessed for similarities and difference and their information values. Furthermore, this work will help to evaluate the possibility for and potential of near real time applicability of crime and social media interactive mapping and clustering.