Abstract

This thesis details the creation of an open-source Web GIS application that can quickly match crime incidents and location-tagged social media posts that share location in space and time. The objective was in support of an over-arching goal of providing a publicly available investigative tool that could be used by citizens and members of law enforcement, augment existing social media strategies in law enforcement, and aid in accelerating case clearances. Detailed herein, are the methods for, and the open-source and free-to-use technologies used to, create the application. While the application works as expected, it was discovered that the study area did not produce the amount of location-tagged social media information needed for a consistently high rate of spatiotemporal co-location of crime incidents with social media posts. Analysis of the data collected for this work confirmed the reasons for the lack of co-locations and revealed directions for future work, which are also discussed.