Project ID: CS18

Project Source: School of Computer Science

Project Title: Spatial Digital School Violence and Aggression in NSW

Project Description and Scope:

Occupational violence and aggression within schools are widely prevalent. Several strategies have been proposed to ensure that Australian schools are a safe environment for students and educators. For example, the Queensland government has a zero-tolerance stance on violence at schools. Proposing a prevention strategy using the data collected is still understudied due to a lack of available information. However, currently, the NSW department of education published several related datasets to increase the research on occupational violence at NSW schools. These datasets include incident reports, comprehensive information for all government schools in NSW, monthly data on all criminal offences by geography in NSW, and others.

In this study, we aim to create spatial digital school violence and aggression in NSW. The digital tool uses the public data which provided by the department of education in NSW. It allows users to visualize occupational violence and aggression in schools considering spatial and temporal filters. The tool will identify the most prominent correlations between different variables and detect interesting clusters and trends.

We aim to publish the tools through a web API.

Expected outcomes/deliverables:

Report

Visualization tool to be published in web API

Specific required knowledge, skills, and/or technology:

data analytics, Python or R

Web development

Resources provided by the client: