FACULTY OF ARTS

Adelaide Summer Research Scholarship 2020-2021

Using Software Tools to Identify and Analyse Patterns of Offending and Victimisation Online

Supervisor: Dr Russell Brewer

Department of Sociology, Criminology and Gender Studies

School of Social Sciences

Background: Our research team has developed a software infrastructure that scrapes data from online sources, extracts and matches facial and voice biometric characteristics, and permits the analysis of patterns in the data. This software was originally designed to aid in the discovery and investigation of Child exploitation materials on the Internet, in so far as it is able to automatically detect new media as it becomes available online, as well as identify instances of co-offending and co-victimisation across media files.

Student project summary: The student project will involve a series of validation (or testing) exercises, to assess the performance of the software, with respect to its facial and audio recognition and matching capabilities. To this end, the student will learn to use the tool to scrape (legal) media from websites, catalogue the downloaded materials, and use the matching tool to help determine the software's performance. The student will then work with Dr Brewer and other members of the research team to complete a series of validation exercises, and then write up the results as a peer-reviewed journal article.

Student eligibility: To be eligible for this position, applicants must have at some background in Criminology at the University of Adelaide or elsewhere (i.e. completed at least 6 units of CRIM courses) and must have successfully completed at least _one_ research methods topic at the University of Adelaide or elsewhere (e.g. CRIM 3004, GEOG 2132, SOCI2012, SOCI 3010, SOCI3012 or others). Computer programming experience is not required, however, applying students should be familiar with and very comfortable using different types of software, including Excel.

For more information about the Digital Youth Research Lab and our other research projects, visit our website: www.DigitalYouthResearch.org.

The student will gain the following research skills and experience;

- co-author an AIC Trends & Issues manuscript, being written by Brewer, Westlake (San Jose State University), Ross (Michigan State University), Swearingen (Michigan State University) and Bright (Flinders University)

- Develop discipline-specific knowledge on the topics of time and change sufficient to make a critical contribution to the evaluation of work in progress.