Alex John Quijano* (aquijano4@ucmerced.edu), Merced, CA 95343. An Unsupervised Machine Learning Approach for Detecting the Language of Prejudice Including Micro-aggressions on Social Media.

This study focuses on integrating semantic and sentiment analysis on the detection of the language of prejudice on Twitter. We explored NLP methods and historical word usage to develop a machine learning algorithm that detect the language of prejudice. The use of prejudicial language is often prevalent in social media during significant events such as presidential elections, holidays, and tragedies. It is important to note that there are two main ways on how users express prejudice, (1) by directly using active words, or (2) by forming a sentence in a form of micro-aggression, which is normally harder to detect. These type of prejudicial language are learned based on culture and it undergoes accumulation of random changes in time. Take the word "gay" for instance. It was originally defined as "cheerful" or "happy". As recent as the 20th century, the definition of "gay" has become polysemous where it is defined as "homosexual" and it is used as either a description or a pejorative. When using the sentence "That's so gay!" today would be insidious. In this talk, we present a classification problem that detects such language based on historical and sociocultural accounts to understand why and how prejudicial language change in time and across cultures. (Received September 26, 2017)