WEEK 2 SUMMARY OF READING:

The below-mentioned research paper studies the relationship between social media profiles acquired from Twitter and personality traits using the Big Five Personality Inventory. The authors administered the personality test to 279 subjects through a Twitter application and collected their 2000 most recent public tweets. The tweets were processed and quantified to obtain a feature set that was used to develop a model that can predict personality traits with an accuracy of between 11% and 18%.

The ability to predict personality has significant implications for personalizing interfaces and information in social media. For example, it could be used to tailor the friend suggestion system based on a user's introversion or extroversion, and show personalised ads, user interface and content for the correct target audience. The paper discusses some of the opportunities for marketing and interface design and acknowledges that there is much work to be pursued in this area.

The authors faced the challenge of not having a sufficient dataset per user to get their personality traits accurately. The small correlations in the data made it difficult to train machine learning algorithms for classification. Despite this, the authors were able to achieve large and significant improvements over the baseline classification of each personality factor.

One area for future research is the connection between personality and the actual social network. The authors only considered two structural features - number of friends and network density - but did not look at personality scores between friends. Improving knowledge of the relationships between personality, tie strength, trust, and other factors could lead to a better understanding of how to present trusted, socially relevant, and well-presented information to users.

Reference:

Golbeck, J., Robles, C., Edmondson, M., & Turner, K. (2011). Predicting Personality from Twitter. In 2011 IEEE International Conference on Privacy, Security, Risk and Trust and IEEE International Conference on Social Computing, pp. 149–156. IEEE Computer Organization.