Announcement of a Defense of a Dissertation

Denise Koessler Gosnell, Candidate for a Doctor of Philosophy
Dr. Michael W. Berry, Major Professor

Tuesday, August 05, 2014 at 10:00 A.M.
MHK 435

“Social Fingerprinting: Identifying Users of Social Networks by their Data Footprint”

Abstract

This research defines, models and quantifies a new metric for social networks: the social fingerprint. Just as one's fingers leave behind a unique trace in a print, this dissertation introduces and demonstrates that the manner in which people interact with other accounts on social networks creates a unique data trail. Accurate identification of a user’s social fingerprint can address the growing demand for improved techniques in unique user account analysis, computational forensics and social network analysis.

In this dissertation, we theorize, construct and test novel software and methodologies which quantify features of social network data. All approaches and methodologies are framed to test the accuracy of social fingerprint identification. Further, we demonstrate and verify that features of anonymous data trails observed on social networks are unique identifiers of social network users. Lastly, this research delivers scalable technology for future research in social network analysis, business analytics and social fingerprinting.