

Title: Detecting and Taming Wild Social Bots with Mixed Methods

Organizers: Amir Karami (University of South Carolina), Vanessa Kitzie (University of South Carolina), Ehsan Mohammadi (University of South Carolina)

Abstract: This practical workshop will introduce the audience to the basics of Twitter data collection and analysis, and social bots detection. Topics will include importance of social bots detection, bot detection techniques, and text mining techniques for Twitter content analysis. Attendees will learn how to use open source tools to collect Twitter data, detect social bots, and use both quantitative and qualitative methods for investigating activities of social bots. Practical examples will be provided and implemented in the context of mass shootings.

Description

Purpose and Intended Audience: Purpose and Intended Audience: The purpose of this workshop is to introduce novice and experienced researchers alike to social bots analysis. The audience will learn how to install and use open source tools including Twitter API, Botometer, and R to examine social bots in Twitter. This workshop will help researchers to develop research projects in Twitter for health and social science applications. Considering Twitter data and social bots analysis, they will also learn about current studies, current funded projects, available open source tools, and exciting directions for the future.

Proposed Format: This half-day workshop consists of three key areas: 1) Overview social media studies, 2) Review basic concepts of social bots analysis, 3) Guide participants in using Twitter API, Botometer, and R packages for text mining. Amir Karami, Vanessa Kitzie, and Ehsan Mohammadi will lead and organize the workshop. The organizers have been studied social bots in mass shootings, health, and political applications.

Timeline:

9:00	<i>Welcome, Overview, Introductory Activity</i> Presenters: Amir Karami
9:20	<i>Twitter Data Collection and Analysis</i> <i>Text Mining with R</i> Presenters: Amir Karami and Vanessa Kitzie
10:15	Break
10:30	<i>Social Bots Detection Basics and Applications</i> <i>Social Bots Analysis with Mixed Methods</i> Presenters: Vanessa Kitzie and Ehsan Mohammadi
10:50	<i>Twitter API, Botometer I</i> Presenters: Amir Karami, Vanessa Kitzie, and Ehsan Mohammadi
11:15	Break
11:30	<i>Twitter API, Botometer II</i> Presenters: Amir Karami, Vanessa Kitzie, and Ehsan Mohammadi
12:20	<i>Participant Q&A</i> Presenters: Amir Karami, Vanessa Kitzie, and Ehsan Mohammadi
12:30	<i>Official Closing</i>

Goals or Outcomes:

- Explain social media data analysis and its advantages and disadvantages
- Explain social bots and the importance of social bots study Develop a text mining project with R
- Navigate Twitter API and Botometer
- Detect and analyze social bots

Prior to the workshop, we will share the required information to download and install the open source and free tools, and ask to read a few research papers to get a better idea about the workshop.

Relevance to the iConference: This workshop is in line with the iConference theme, *inform | include | inspire* for several reasons. The workshop considers how researchers can use the above-mentioned tool to develop their own research projects. The organizers will cover all the required materials in the workshop. This workshop will encourage the researchers to collect and analyze social media and social bots for health and social science applications.

This workshop will appeal to informatics researchers with and without pre-knowledge of social media and social bots analysis. We believe this workshop is a great opportunity for developing new projects and future collaborations.

Duration: Half-day event

Attendance: 30 attendees maximum

Special Requirements: Audience will need to bring their laptop.