RESEARCH PRESENTATION
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Student Union Building, Ballroom A
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DeBot: Real-Time Bot Detection via Activity Correlation

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Automated accounts, called bots, are fairly common in social media. Most bots are inappropriately used to pretend to be human, entice people to follow, push spam content and participate in sponsored activities. Existing bot detection methods are limited because these methods consider user accounts independent of other accounts and can detect bots only after they initiate harm. We have developed a real-time activity-correlation finder on Twitter, named DeBot, to detect abnormally correlated user accounts, which are very unlikely to be human. This approach to bot detection considers cross-matching users and can detect bots as soon as they begin posting. Our correlation finder works at 48 tweets per second for millions of users and discovers groups of abnormally correlated accounts. The correlation finder produces a daily report on the latest correlated bots at few hundred bots per day. We observe that most of these bots appear to be humans, while their synchronicity with other users reveals severe abnormality. We observe that some bots can avoid suspension and remain active for months, and we show that DeBot detects bots at a rate higher than the rate Twitter is suspending them.

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