DECLARATION

We hereby declare that the project entitled "Detecting Bots in Twitter" has been carried out by us under the guidance of Dr. Nagegowda K S, Assistant Professor and submitted in partial fulfillment of the course requirements for the award of degree of Bachelor of Technology in Computer Science and Engineering of PES University, Bengaluru during the academic semester January – May 2019. The matter embodied in this report has not been submitted to any other university or institution for the award of any degree.

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ABSTRACT

One of the important problems in social media platforms like Twitter is the large number of social bots or Sybil accounts which are controlled by automated agents, generally used for malicious activities. These include directing more visitors to certain websites which can be considered as spam, influence a community on a specific topic, spread misinformation, recruit people to illegal organizations, manipulating people for stock market actions, and blackmailing people to spread their private information by the power of these accounts.

Consequently, social bot detection is of great importance to keep people safe from these harmful effects. In this study, we approach the social bot detection on Twitter as a supervised classification problem and use machine learning algorithms after extensive data preprocessing and feature extraction operations. Large numbers of features are extracted by analysis of Twitter user accounts for posted tweets, profile information and temporal behaviors. In order to obtain labeled data, we use accounts that are suspended by Twitter with the assumption that majority of these are social bot accounts. Our results demonstrate that our framework can distinguish between bot and normal accounts with reasonable accuracy.

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