Twitter Bot Detection with Graph Neural Networks

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1. Background

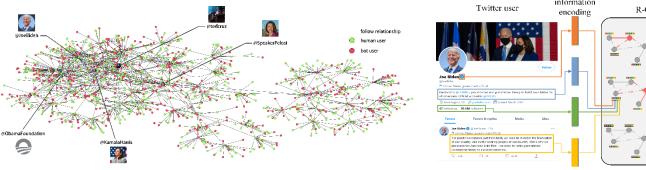**Twitter** is a popular social media with 330 million monthly active users.

A **Twitter bot** is a type of bot software that controls a Twitter account via automated programs and the Twitter API.

Twitter bot detection aims to identify malicious bots on Twitter based on multi-modal user information.
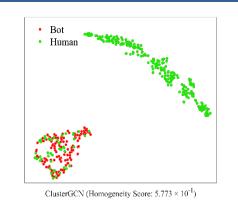
2. Our Proposal

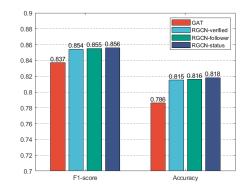We propose to leverage the Twittersphere graph with **graph neural networks**.

Twittersphere Graph Structure

Bot Detection with GNNs

3. Experiments and Findings

ClusterGCN (Homogeneity Score: 5.773×10^{-1})

User Representation

Graph Heterogeneity

Bot Word Cloud

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