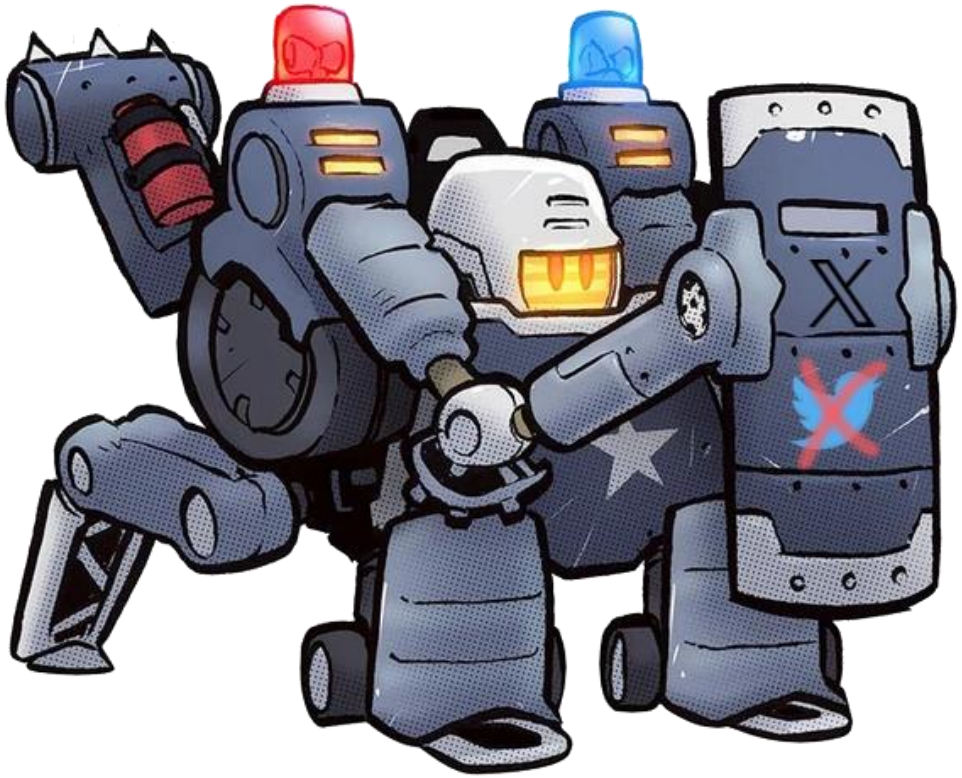
Police Bot

Enhancing Social Media Governance with Policing Bots



Group Members

- Students:
  - Liam Dumbell
  - Gabriel Silva
  - Cody Manning
- Faculty Advisor / Project Client:
  - Khaled Slhoub
- Computer Science Project Instructor:
  - Dr. Phillip Chan

Motivation and Goal

Motivation

- Social Media Sites have had a prolonged issue with malicious bot accounts
- There is a need for a tool that can easily distinguish a bot account from a human as well as a malicious bot from a beneficial one.

Goal

- Allow users to detect malicious bots more easily while still being able to take advantage of the useful bots.
- Categorize bots by different levels of maliciousness
- Properly report bots with a high level of maliciousness to the proper administrators

Key Features

The Three D's:

- Detect:
  - Allows users to detect artificial users (bots) on a social media platform.
- Distinguish:
  - Allows users to distinguish beneficial bots from malicious ones.
- Decide:
  - Allows users to determine the level of maliciousness of a bot account
  - Allows users to decide to report the account after determining that it is a bot and its level of maliciousness

Technical Challenges

Team members currently have:

- No experience using and working with X/Twitter Virtual Environments.
- Little experience using the Twitter API.
- Little experience working with bots and no experience creating and detecting them.
- No experience with the libraries or other methods for developing bots for social media platforms.
- Insufficient HTML experience for the scope of this project.

Milestone 1
Oct 2

- Compare and select technical tools
  - Tweepy Python library
  - OAuth 2.0 Flask Application Approach
- Create small demos to evaluate the tools
  - Create simple Twitter Bots for both Tweepy and Flask App approach
- Resolve technical challenges
  - Make progress on learning how to work with the Twitter API
  - Learn how to create simple Twitter Bots
- Compare and select collaboration tools for software development, documents/presentations, communication, task calendar.
- Create Requirement Document.
- Create Design Document.
- Create Test Plan.

Milestone 2
Oct 30

- Implement, test, and demo the system used to compile data on accounts thought to be bots and store the account data locally to be analyzed.
- Learn the Twitter API well enough to develop the rest of our features within the API
  - Detection of Bot accounts using account data
  - Distinguish beneficial bot accounts from malicious ones based on account interactions and posts
  - Decision system that determines if a bot account should be reported or not

Milestone 3
Nov 27

- Decide on a method of detecting bot accounts.
- Implement, test, and demo the tool to detect whether an account is run by a human or a bot based on our chosen method.

This concludes our presentation, Thank You