Disruption of Democratic Processes by Bots

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What Are Bots?



 Bots are automated programs performing internet tasks.

- Social bots mimic human behavior on platforms.
- Can be rule-based or use NLP/AI techniques.



• Designed to interact, amplify, or manipulate online discourse.

How Bots Disrupt Democracy



Real-World Examples







• 2016 US ELECTION: RUSSIAN BOTS SPREAD DIVISIVE CONTENT. • BREXIT REFERENDUM: COORDINATED BOT ACTIVITY OBSERVED. • COVID-19: BOTS SPREAD CONSPIRACY THEORIES ONLINE.

Facts

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66% of tweeted links during the 2016 US election were shared by bots. (*Source: Indiana University, 2017*)



Over 50,000 bots were detected spreading pro- and anti-Clinton content. (*Source: Twitter Transparency Report*)



70% of bots retweet content rather than generating original messages. (*Ferrara et al., 2016*)



In **2020**, **15% of all Twitter accounts** were estimated to be automated or semi-automated.



Bots can amplify a message's visibility up to 10x, distorting perceived public opinion.



Countermeasures & Conclusion



NLP-Based Detection: Linguistic pattern analysis.



Platform Policies: Detection, banning, transparency.

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Public Awareness: Digital literacy is essential.



Bots challenge democratic integrity. Detection is vital.

References

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