Disinformation and Social Bots in Online Social Networks

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BIG SOCIAL DATA

RESEARCH TOPICS AND APPLICATIONS

topics:

- detection of malicious accounts (social bots, trolls, fakes, …)

- disinformation (fake news, conspiracy theories, hoaxes, …)

- polarization (echo chambers, extremism, hate speech, …)

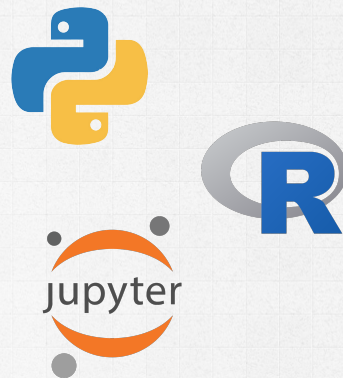IL TIRRENO

Insulti e like ai leader politici, il ricercatore del Cnr: «Più di metà sono fatti da robot»

Stefano Cresci spiega come il dibattito sui social di questi giorni sia inquinato da "manine" e falsi

la Repubblica.it

Elezioni politiche 2018

In due mesi 60mila 'falsi' tweet sui leader politici. Ma (per fortuna) l'Italia è ancora indietro

Analisi dell'Iit del Cnr con Repubblica. I fake follower hanno prodotto negli ultimi due mesi il 2,5% dei tweet in cui viene citato almeno un capo di partito. Troppo pochi per avere un impatto sul voto, ma questi dati ci raccontano molte altre cose

24 ORE   FINANZA & MERCATI

INCHIESTA

Così i tweet dei robot insidiano le news dei listini di Borsa

di Vittorio Carlini | 23 marzo 2018

applications:

- politics (political elections, referendum, …)

- controversial discussions (vaccines, immigration, …)

- finance (cryptocurrencies, …)

METHODOLOGIES

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- machine learning and artificial intelligence (deep learning)

- big data

- natural language processing

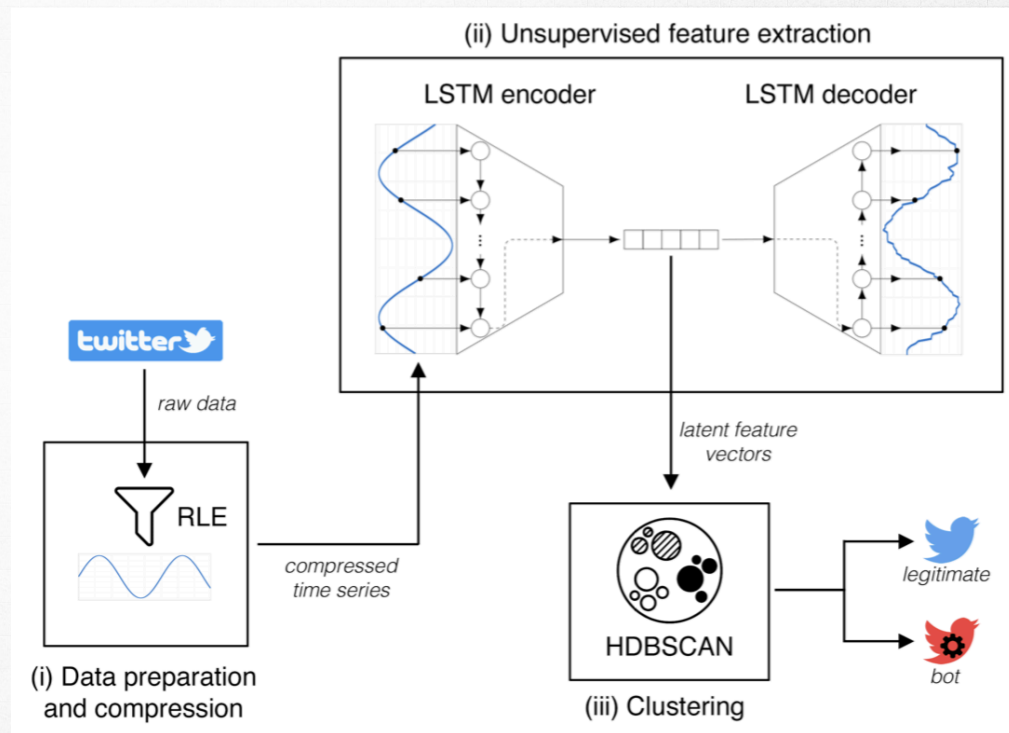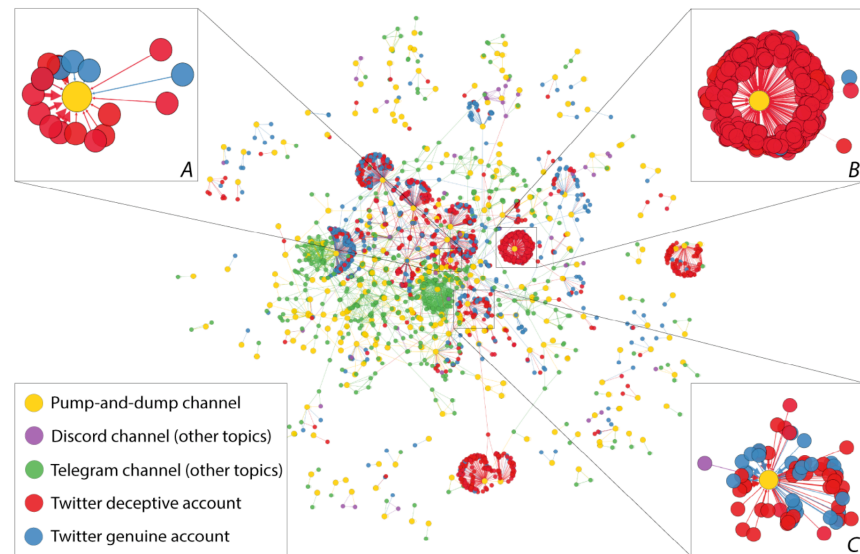- social network analysis
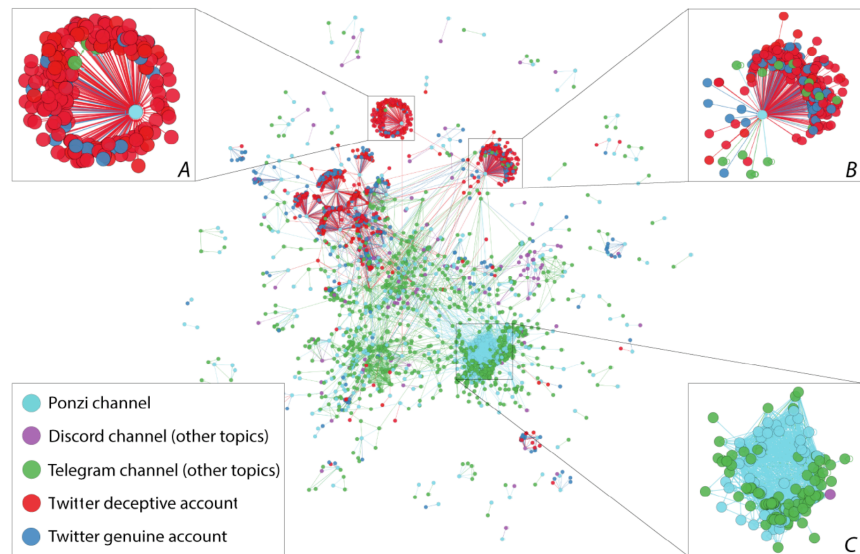
- information visualization

BOT DETECTION

RTbust:

- technique for detecting Twitter bots

- based on deep learning

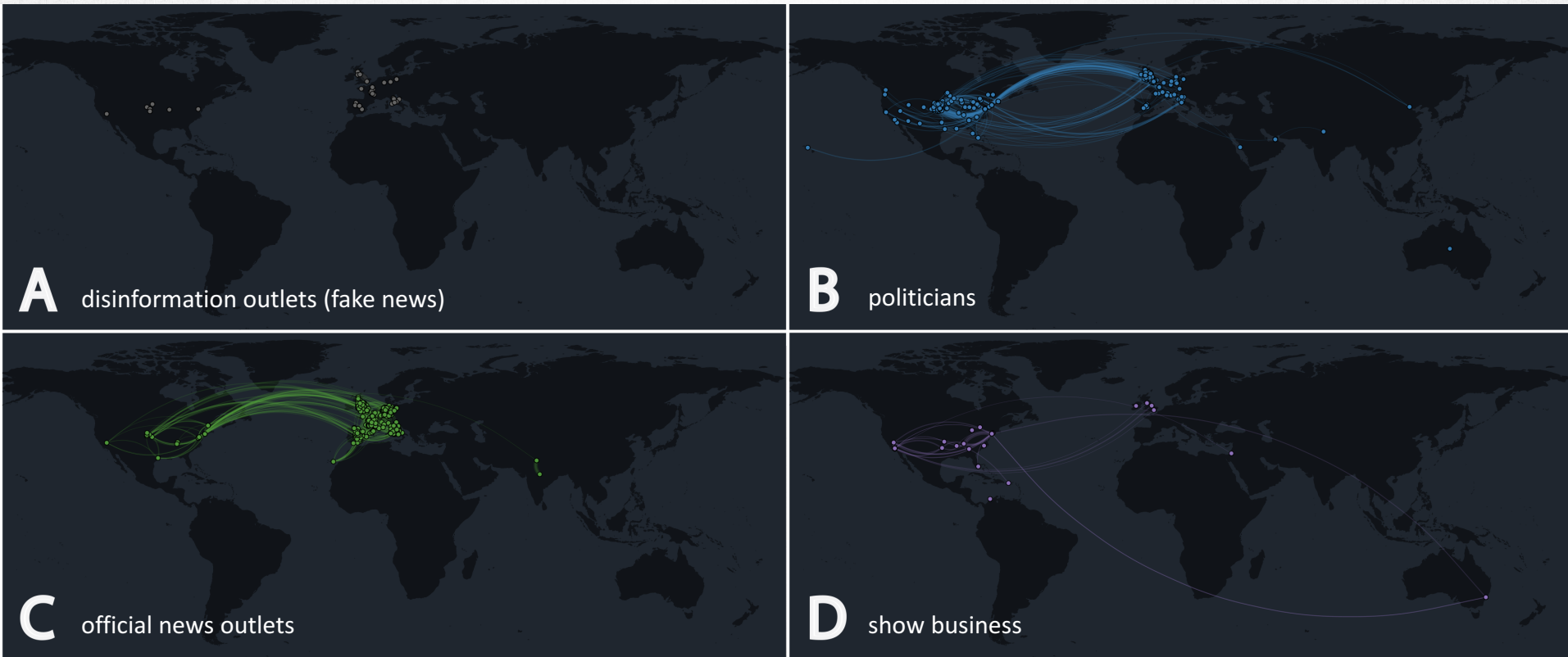- Master's thesis of *Michele Mazza*

- presented in Boston (USA) in 2019

Mazza, et al. "RTbust: Exploiting Temporal Patterns for Botnet Detection on Twitter."
11th ACM International Conference on Web Science (WebSci). ACM, 2019.

ONLINE CRYPTOCURRENCY FRAUDS

Legend (left):
- Ponzi channel
- Discord channel (other topics)
- Telegram channel (other topics)
- Twitter deceptive account
- Twitter genuine account

Legend (right):
- Pump-and-dump channel
- Discord channel (other topics)
- Telegram channel (other topics)
- Twitter deceptive account
- Twitter genuine account

started with **Master's thesis of *Serena Tardelli*** & **PhD work of *Leonardo Nizzoli***

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FAKE NEWS IN 2019 EU ELECTIONS

A disinformation outlets (fake news)

B politicians

C official news outlets

D show business

OUR TEAM

young, dynamic, and multidisciplinary team:

- 4 computer scientists

- 4 computer engineers

- 1 physician

- 1 economist

- 1 political scientist

- 1 digital anthropologist

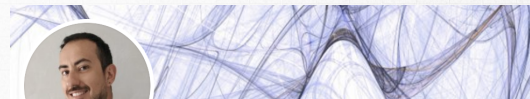# JOIN US!

want to know more?
come talk to me at the buffet!

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Researcher, IIT-CNR, Italy. I work on #socialmedia analysis, social #bot detection and crisis informatics. I love travels 🏖, food 🍝, and data 📊. Tw: 🇬🇧 🇮🇹

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SOME PUBLICATIONS

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- Mazza, et al. "RTbust: Exploiting Temporal Patterns for Botnet Detection on Twitter." *11th ACM International Conference on Web Science (WebSci)*. ACM, 2019.

- Cresci, et al. "Cashtag piggybacking: Uncovering spam and bot activity in stock microblogs on Twitter." *ACM Transactions on the Web (TWEB)*. ACM, 2019.

- Cresci, et al. "Social fingerprinting: detection of spambot groups through DNA-inspired behavioral modeling." *IEEE Transactions on Dependable and Secure Computing*. IEEE, 2017.

- Cresci, et al. "The paradigm-shift of social spambots: Evidence, theories, and tools for the arms race." *26th International Conference on World Wide Web companion (WWW)*. IW3C2, 2017.

- Cinelli, et al. "The Limited Reach of Fake News on Twitter during 2019 European Elections." *arXiv:1911.12039*. 2020.