

# The Role of AI in the Future of News Intelligence

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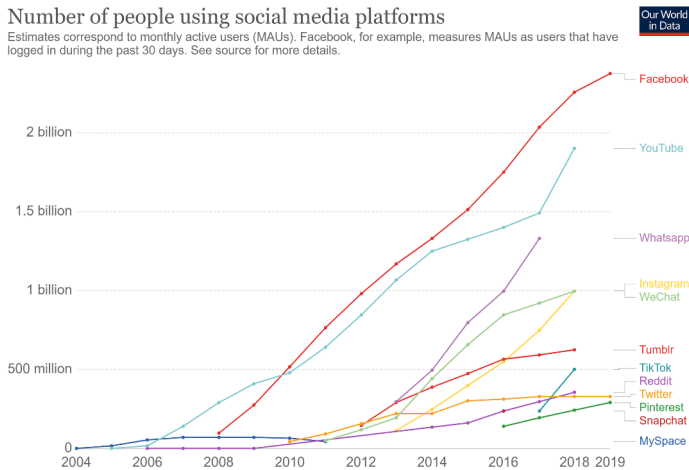
April 14, 2021

# The Future of News Is More Digital

- People are increasingly consuming digital news, e.g., social media for information sharing, social networking, interaction, ...
- 68% of Americans get news on social media

Number of people using social media platforms

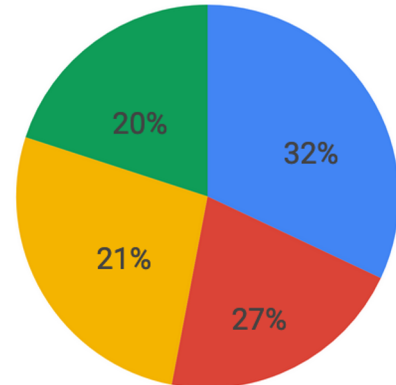
Estimates correspond to monthly active users (MAUs). Facebook, for example, measures MAUs as users that have logged in during the past 30 days. See source for more details.



Source: Statista and TNW (2019)

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• Never • Hardly Ever • Sometimes • Often



<https://www.journalism.org/2018/09/10/news-use-across-social-media-platforms-2018/>

# Disinformation is Rampant on Social Media

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- Disinformation is false information [news or non-news] with an evil intention to mislead the public
- *“A lie will gallop halfway round the world before the truth has time to pull its breeches on.”*
- Disinformation is dividing, misleading, and can also be weaponized
- After it is detected, we want to have it mitigated

# Challenges for AI in Mitigation

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- Can AI help? How?
  - E.g., Using AI debaters?
- Accurate detection  $\neq$  successful mitigation
- Mitigation involves *users*
  - It is a complex issue with new dimensions
  - Users have their own judgments/opinions
- Users are on social media “alone together”

# We, Users, are Irrational

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- Echo chambers
  - Examine our social networks
- Filter bubbles
  - Look at the news sources we get our daily news
- Are we susceptible to disinformation?
  - “No, I am immune to disinformation”
- We are easy to fall victims to *confirmation* and *desirability* biases

# A Few More Challenges to AI

- Conversational receptiveness
  - We are so eager to convey our ideas or beliefs and want to win the argument

<https://www.scientificamerican.com/article/the-right-way-to-talk-across-divides>
- *If  $A \rightarrow B$ , then  $\neg A \rightarrow \neg B$*  (let's pause and take poll)
  - Can you think of an example of this form?

**An easy to make, common logic error in daily life**

- Conclusion: *Facts and logic often cannot change people's stand*

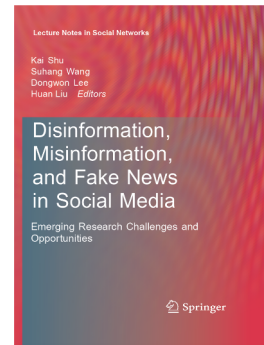
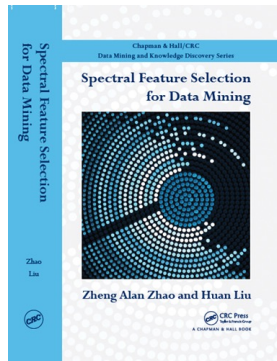
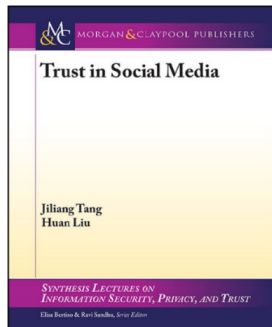
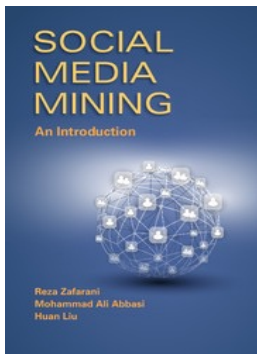
# Is AI Sufficient for News Intelligence?

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- Mitigation is important, but
  - We all have our own preferences ☹️
- Mitigation is an issue of different disciplines
  - It is a complex problem
  - Diverse approaches are essential
- Look beyond data-driven AI to embrace a *user-aware* interdisciplinary approach

# Thank You All

- Three Recent Surveys
  - Learning Causality with Data: Problems & Methods
  - Privacy in Social Media: Identification, Mitigation, ...
  - Causal Interpretability: Problems, Methods & Eval ...



<http://www.public.asu.edu/~huanliu>