

# Case studies in Ethics and Computer Science

# Experimental evidence of massive-scale emotional contagion through social networks

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# Aka Facebook emotion contagion study

“We show, via a massive ( $N = 689,003$ ) experiment on Facebook, that emotional states can be transferred to others via emotional contagion, leading people to experience the same emotions without their awareness. We provide experimental evidence that emotional contagion occurs without direct interaction between people (exposure to a friend expressing an emotion is sufficient), and in the complete absence of nonverbal cues.”

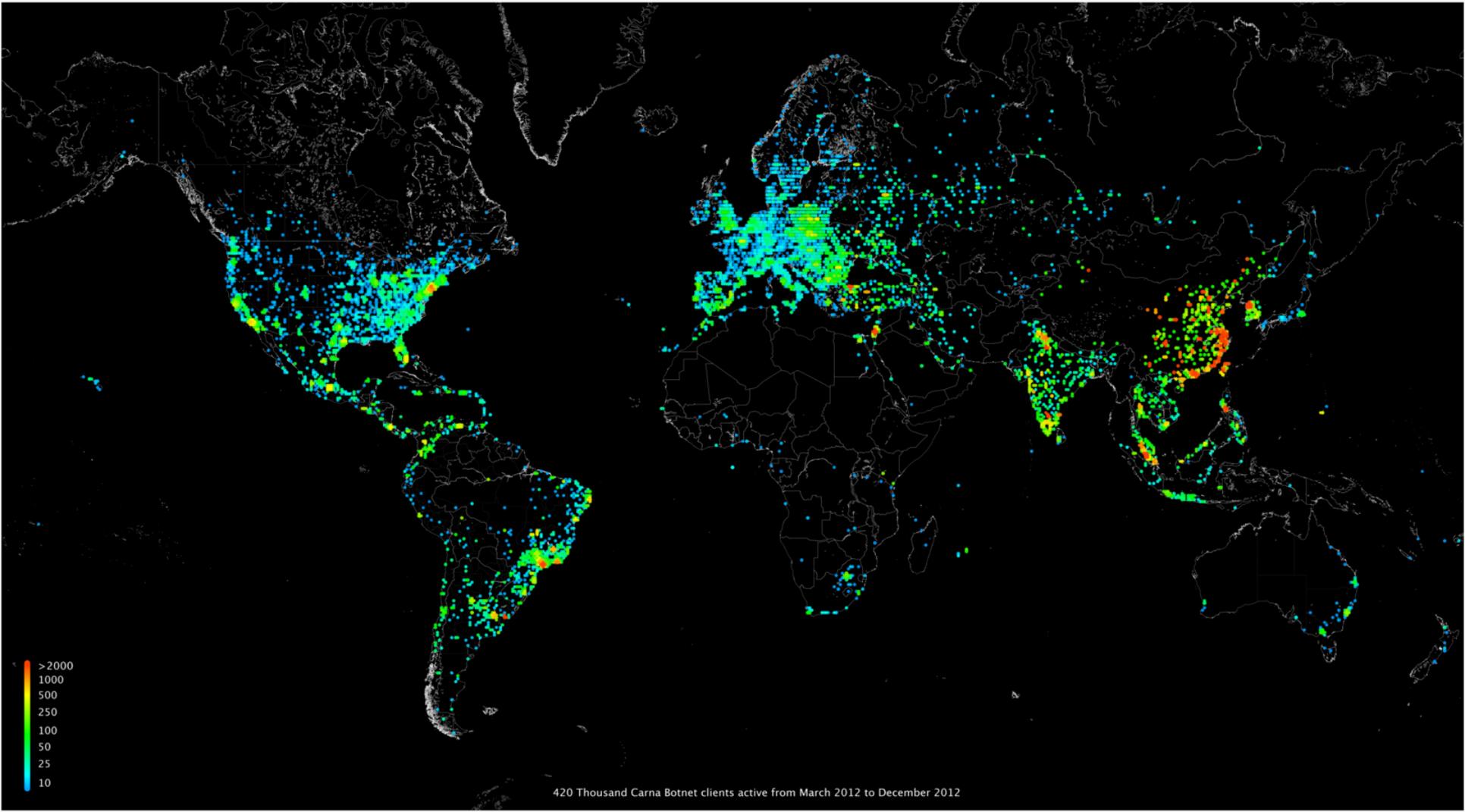
# The study

- All Facebook users who spoke English qualified
- Two groups: positive and negative emotions
- Positive/negative posts were then suppressed from the news feed
- 689,003 participants randomly selected by user id
- Saw an impact
  - When positive posts withheld the participant's posts got more negative
  - When negative posts withheld the participant's posts got more positive
  - Withdrawal effect: people who saw less emotion posts less likely to express themselves for several days

Mapping the internet

**Someone made the most detailed map  
of the internet ever by hacking into just  
under half a million computers**

<http://motherboard.vice.com/blog/this-is-most-detailed-picture-internet-ever>



**Is it ethical to use this data to do good things?**

# Think-pair-share

- Does the Facebook Emotion Contagion study fit the requirements of the Menlo Report?

# The Menlo Report (2012)

- Respect for persons
  - Protecting the autonomy of all people and treating them with courtesy and respect and allowing for informed consent. Researchers must be truthful and conduct no deception
- Beneficence
  - The philosophy of "Do no harm" while maximizing benefits for the research project and minimizing risks to the research subjects
- Justice
  - Ensuring reasonable, non-exploitative, and well-considered procedures are administered fairly — the fair distribution of costs and benefits to *potential* research participants — and equally.
- Respect for law and public interest
  - Engage in legal due diligence. Be transparent in methods and results. Be accountable for actions.