CS-234
Technologies for Democratic society

Fall 2024

Week 4

Scholarly peer-reviewed publication

starting in 1665 - Royal Society
heavily developed esp. 18th - 19th

Purpose: analyze content of research
before publication
- identify potential errors
  filtering bad/wrong results
- apply scientific method,
  best practices of research area
- feedback - constructive critique,
  potential improvements

Peer review tools

Most scientific disciplines —
  journal-oriented   — long review cycles
Computer science —
  conference-oriented for rapid turnaround
    (first: conf pub, then maybe journal)
  workshops: even shorter cycles
Preprints (open acess)   arXiv.org ...
  lightweight   non-peer reviewed,
  timestamped, archived, available

Blinding

non-blind:
   authors & reviers see each others' identities

single-blind:
   reviers see author identities
   authors don't see reviewer identities

double-blind:
   authors & reviers anonymous to each other
conflicts of interest, misconduct
judge paper on its' merits , non-discrimination

Manipulation of influence metrics/processes

Scientific citation manipulation
- metrics:
  - # of citations
  - # of publications
  - h-index

manipulations
- coercive citation
- citation rings
- honorary authorship

7	paper 2	↓ 1
5	paper 1	↓ 2
2	paper 3	~~3?~~
1	paper 1	

Search engine manipulation

- use botnets to generate traffic ("activity")
- want many links to our site
  from Blog sites, social media, ...
- want "high-influence" links
- hidden search-engine-specific content
  keywords
- doorway pages
- create many fake
  pages linking to each other
  or