Announcements 3/22

• **Op-Ed finals due Friday, 3/29.**
  
  – For those who will turn in a Final Op-Ed on March 29
    
    • **Revision will not be graded unless you also turn in Fran’s marked-up copy of the Draft Op-Ed**
    
    • Final Op-Ed should be a revision based on Draft Op-Ed comments, not a new Op-Ed on a different topic
    
    • Final Op-Ed should be better than the Draft Op-Ed. Final Op-Ed grade will be recorded, even if it is lower than the Draft Op-Ed

• **Briefings due Friday, 4/5.** (Hardcopy to Fran at the beginning of class).

• **Topic Reports for groups reporting 4/17 and 4/26 due April 12.** (Hardcopy to Fran at the beginning of class and .pdf to Fran with last names deleted).

• **No class Wednesday 3/27**
<table>
<thead>
<tr>
<th>Wednesday Section</th>
<th>Friday Lecture (first half)</th>
<th>Second half of class</th>
<th>Assts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 9: NO CLASS</td>
<td>January 11: INTRO – DATA AND SOCIETY</td>
<td>Fran presentation demo</td>
<td></td>
</tr>
<tr>
<td>January 16: NO CLASS</td>
<td>January 18: BIG DATA 1; Topic groups / Topic materials information</td>
<td>Student presentations</td>
<td></td>
</tr>
<tr>
<td>January 23: Student presentations</td>
<td>January 25: BIG DATA 2</td>
<td>Student presentations</td>
<td>Op-Ed instructions</td>
</tr>
<tr>
<td>January 30: NO CLASS</td>
<td>February 1: DATA AND SCIENCE</td>
<td>Student presentations</td>
<td></td>
</tr>
<tr>
<td>February 6: NO CLASS</td>
<td>February 8: DATA STEWARDSHIP AND PRESERVATION</td>
<td>Student presentations</td>
<td>Group Topics due</td>
</tr>
<tr>
<td>February 13: NO CLASS</td>
<td>February 15: INTERNET OF THINGS</td>
<td>Student presentations</td>
<td></td>
</tr>
<tr>
<td>February 20: Student presentations</td>
<td>February 22: DATA AND PRIVACY / FOUNDATIONS</td>
<td>Student presentations</td>
<td>Op-Ed Drafts due</td>
</tr>
<tr>
<td>February 27: NO CLASS</td>
<td>March 1: DATA AND PRIVACY / POLICY AND REGULATION</td>
<td>Student presentations</td>
<td>Briefing instructions</td>
</tr>
<tr>
<td>March 6: Spring Break</td>
<td>March 8: Spring Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 13: Student presentations</td>
<td>March 15: DATA AND ENTERTAINMENT [ANDY MALTZ]</td>
<td>Student presentations</td>
<td>Topic Reports 1 due</td>
</tr>
<tr>
<td>March 20: TOPICS PRESENTATIONS 1</td>
<td>March 22: DATA AND DATING</td>
<td>Student presentations</td>
<td></td>
</tr>
<tr>
<td>March 27: NO CLASS</td>
<td>March 29: DIGITAL RIGHTS 1</td>
<td>Student presentations</td>
<td>Op-Ed Finals due</td>
</tr>
<tr>
<td>April 3: NO CLASS</td>
<td>April 5: DIGITAL RIGHTS 2</td>
<td>Student presentations</td>
<td>Briefings due</td>
</tr>
<tr>
<td>April 10: Student presentations</td>
<td>April 12: DATA AND ETHICS</td>
<td>Student presentations</td>
<td>Op-Ed Finals returned, Topic Reports 2, 3 due</td>
</tr>
<tr>
<td>April 17: TOPICS PRESENTATIONS 2</td>
<td>April 19: CAREERS IN TECH [KATHY PHAM]</td>
<td>Student presentations</td>
<td></td>
</tr>
<tr>
<td>April 24: Student presentations</td>
<td>April 26: TOPICS PRESENTATIONS 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Finding a “Mate” has changed ...

• **Relationship**
  – Social contract → romantic “soulmates”

• **Potential Partner pool**
  – Typically within your community but your community is increasingly on-line
  – Someone you meet through family / church / neighborhood → Someone you meet through work, travels, your social network, etc.
Data and Dating

- Paths to relationships
  - Personal contacts in “real world” settings
  - Family arrangement
  - Matchmakers
  - Personal ads
  - On-line sites and apps

- Online dating vs. conventional ways of meeting
  - **Access** – exposure to large pool of romantic partners
  - **Communication** – opportunity to utilize computer-mediated communication before meeting
  - **Matching** – use of an algorithm to select potential partners

From https://visual.ly/community/infographic/love-and-sex/online-dating-ecosystem
On-line dating

• On-line dating increasingly prevalent
  – 15% of Americans have used on-line dating or mobile apps
  – 41% of Americans know someone who uses online dating; 29% know someone who has met a spouse or long-term partner via online dating

• 5% of Americans who are in a marriage or committed relationship say they met their significant other online.

From http://www.pewinternet.org/2016/02/11/15-percent-of-american-adults-have-used-online-dating-sites-or-mobile-dating-apps/
Fig. 1. Percentage of Americans who met their partners online as a function of year met. Data are from Wave 1 of the national data set, How Couples Meet and Stay Together (collected in 2009), for 2,535 heterosexual respondents who were married or in a romantic relationship (cohabiting, dating). The percentages for same-sex couples were generally higher, particularly in the most recent period (61%). Adapted from Table 7 in Rosenfeld and Thomas (2010) with permission from the authors.

From http://journals.sagepub.com/stoken/rbtfl/cK9EB6/4zQ0AM/full
Demographics: Use

Use of online dating sites or mobile apps by young adults has nearly tripled since 2013

% in each age group who have ever used an online dating site and/or mobile dating app

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2013</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>18-24</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>25-34</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>35-44</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>45-54</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>55-64</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>65+</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Survey conducted June 10-July 12, 2015.

PEW RESEARCH CENTER

From [http://www.pewinternet.org/2016/02/11/15-percent-of-american-adults-have-used-online-dating-sites-or-mobile-dating-apps/](http://www.pewinternet.org/2016/02/11/15-percent-of-american-adults-have-used-online-dating-sites-or-mobile-dating-apps/)
Many choices and target audiences for dating sites
(from https://datascience.berkeley.edu/wp-content/uploads/2014/02/BigData-Dating-IG.jpg)

**THE SITES**

- **Match.com**: 21,575,000 members
- **eHarmony**: 15,500,000 members
- **Chemistry**: 30,000,000 members
- **OkCupid**: 30,000,000 members
- **Zoosk**: 25,000,000 members

**SPECIALTY SITES**

- **Apps**
  - Tinder
  - Coffee Meets Bagel

- **Age & Family/ Marital Status**
  - SeniorPeopleMeet
  - SingleParentMeet
  - Ashley Madison

- **Biology**
  - GenePartner (DNA)
  - Find Your Face Mate (facial features)

- **Income**
  - Meet Millionaire
  - MeetingMillionaires

- **Religion**
  - JWedi
  - JDate
  - Christian Mingle

Fran Berman, Data and Society, CSCI 4370/6370
<table>
<thead>
<tr>
<th>Row</th>
<th>Type of site</th>
<th>Distinctive feature</th>
<th>Example sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Site types within the purview of the present article</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>General self-selection sites</td>
<td>Users browse profiles of a wide range of partners</td>
<td>Match, PlentyOfFish, OkCupid</td>
</tr>
<tr>
<td>2</td>
<td>Niche self-selection sites</td>
<td>Users browse profiles of partners from a specific population</td>
<td>JDate, Gay, SugarDaddie</td>
</tr>
<tr>
<td>3</td>
<td>Family/friend participation sites</td>
<td>Users' family/friends can use the site to play matchmaker for them</td>
<td>Kizmeet, HeartBroker</td>
</tr>
<tr>
<td>4</td>
<td>Video-dating sites</td>
<td>Users interact with partners via webcam</td>
<td>SpeedDate, Videodating, WooMe</td>
</tr>
<tr>
<td>5</td>
<td>Virtual dating sites</td>
<td>Users create an avatar and go on virtual dates in an online setting</td>
<td>OmniDate, Weopia, VirtualDateSpace</td>
</tr>
<tr>
<td>6</td>
<td>Matching sites using self-reports</td>
<td>Sites use algorithms to create matches based on users' self-report data</td>
<td>eHarmony, Chemistry, PerfectMatch</td>
</tr>
<tr>
<td>7</td>
<td>Matching sites not using self-report</td>
<td>Sites use algorithms to create matches based on non-self-report data</td>
<td>GenePartner, ScientificMatch, FindYourFaceMate</td>
</tr>
<tr>
<td>8</td>
<td>Smartphone apps</td>
<td>GPS-enabled apps inform users of partners in the vicinity</td>
<td>Zoosk, Badoo, Grindr</td>
</tr>
<tr>
<td></td>
<td><strong>Site types beyond the scope of the present article</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>General personal advertisement sites</td>
<td>Users can advertise for diverse goods and services, including partners</td>
<td>Craigslist, most newspaper sites</td>
</tr>
<tr>
<td>10</td>
<td>Sex or hookup sites</td>
<td>Users meet partners for casual sexual encounters</td>
<td>OnlineBootyCall, AdultFriendFinder, GetItOn</td>
</tr>
<tr>
<td>11</td>
<td>Infidelity sites</td>
<td>Users or partners (or both) pursue extrarelationship affairs</td>
<td>AshleyMadison, IllicitEncounters, WaitingRoom</td>
</tr>
<tr>
<td>12</td>
<td>Sites for arranging group dates</td>
<td>Users propose get-togethers with a group of strangers</td>
<td>Ignighter, Meetcha, GrubWithUs</td>
</tr>
<tr>
<td>13</td>
<td>Social networking sites</td>
<td>Users can meet friends of friends</td>
<td>Facebook, MySpace, Friendster</td>
</tr>
<tr>
<td>14</td>
<td>Massively multiplayer online games</td>
<td>Users can meet partners using avatars in a complex online environment</td>
<td>SecondLife, TheSims, WorldOfWarcraft</td>
</tr>
</tbody>
</table>

Note: The content in this table is illustrative, not comprehensive. The distinctive feature of a particular type of site does not imply that it is the sole purpose or method the site uses; many sites have multiple features or use multiple methods to help users access potential partners. In addition, due to the rapid pace of technological and entrepreneurial innovation, the methods that people use to meet potential romantic partners online are constantly changing. This table represents a snapshot from 2011. GPS = global positioning system.

From http://journals.sagepub.com/stoken/rbtfl/cK9EB6/4zQ0AM/full
Demographics: Gender

Most popular online dating app or websites according to online users in the United States as of January 2018, by gender

This statistic presents the most popular dating apps and websites according to online users in the United States, sorted by gender. During the January 2018 survey period, seven percent of the surveyed male users reported to preferring Match.com, while similarly seven percent of female users stated a similar preference for Match.com.
### Demographics: Age group


#### Most popular online dating app or websites according to online users in the United States as of January 2018, by age group

<table>
<thead>
<tr>
<th>App</th>
<th>18 - 29 years</th>
<th>30 - 44 years</th>
<th>45 - 54 years</th>
<th>55 - 64 years</th>
<th>65 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinder</td>
<td>14%</td>
<td>5%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>PlentyofFish</td>
<td>8%</td>
<td>7%</td>
<td>4%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Match.com</td>
<td>7%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>OkCupid</td>
<td>6%</td>
<td>4%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>EHarmony</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Coffee Meets Bagel</td>
<td>3%</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Bumble</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Grindr</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>A religious based dating app*</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Hinge Down</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Happn</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

This statistic presents the most popular dating apps and websites according to online users in the United States, sorted by age group. During the January 2018 survey period, 14 percent of respondents aged 14 to 29 years stated that Tinder was their favorite online dating app or website.
“Desirability” by Age

- **Desirability** measured by the number of messages a user receives, when and by whom, providing an indication of who finds whom attractive.
  - **Measure of reflected desirability similar to PageRank** – PageRank scores of desirability calculated to create a ranking metric for the study
  - Metric of desirability based on (messaging) behavior, rather than personal qualities (e.g. attractiveness)
  - Desirability rises if many people contact you and they themselves are desirable.

- [Data from study of heterosexual U.S. participants in 4 cities from an on-line dating site.](http://advances.sciencemag.org/content/advances/4/8/eaap9815.full.pdf)
Other interesting data about desirability from http://advances.sciencemag.org/content/advances/4/8/eaap9815.full.pdf

- Men and women tend to write substantially longer messages to more desirable partners.

- Women show an increase in their use of “positive” words (from a DB) when communicating with more desirable partners, while men show a decrease.

- On average, people pursue partners who are roughly 25% more desirable than they themselves are. (Hybrid strategy of “matching” at their own rank and competing for modestly more desirable mates).
On-line matching algorithms

- Matching algorithms generally **proprietary** and considered a competitive advantage
- Compatibility matching offered by on-line sites can be in-depth
- Matching algorithms differ in
  - Use of data **self-collected from users**
  - **Other data** about users
  - What **variables considered** and how they are weighted
  - **Method** to determine how desirable is the individual as a relationship partner
  - Site **goal** (e.g. long-term compatibility, hookup)
Compatibility and complementarity approaches

• Common approaches to matching leverage:
  – **Compatibility / Similarity**: areas in which you and your potential partner are aligned / similar
  – **Complementarity**: areas in which you and your potential partner are different/complementary

• Dating algorithms often leverage these different approaches, typically against a model of what a successful relationship will be like (e.g. having particular attributes, having particular chemistry, etc.)

• Various algorithms may leverage behavioral, anthropological, chemistry, or other models of successful relationships
## 3 approaches to matching

Variables measured and matching principles used. *Domain* = focus of variables, *Constructs* = how variables represent themselves.

<table>
<thead>
<tr>
<th>Matching site</th>
<th>Domain</th>
<th>Construct</th>
<th>Variables assessed</th>
<th>Matching principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>eHarmony</td>
<td>Core traits: “defining aspects of who you are that remain largely unchanged throughout your adult life”</td>
<td>Emotional temperament</td>
<td>Self-concept, emotional status, energy, passion</td>
<td>Similarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social style</td>
<td>Character, kindness, dominance, sociability, autonomy, adaptability</td>
<td>Similarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cognitive mode</td>
<td>Intellect, curiosity, humor, artistic passion</td>
<td>Similarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physicality</td>
<td>Energy, passion, vitality and security, industry, appearance</td>
<td>Similarity</td>
</tr>
<tr>
<td></td>
<td>Vital Attributes: “based on learning experience, and are more likely to change based on life events and decisions you make as an adult”</td>
<td>Relationship skills</td>
<td>Communication style, emotion management, conflict resolution</td>
<td>Similarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Values and beliefs</td>
<td>Spirituality, family goals, traditionalism, ambition, altruism</td>
<td>Similarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Key experiences</td>
<td>Family background, family status, education</td>
<td>Similarity</td>
</tr>
<tr>
<td>PerfectMatch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Sex hormones</td>
<td>Testosterone</td>
<td>Director personality type</td>
<td>Complementarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estrogen</td>
<td>Negotiator personality type</td>
<td>Complementarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dopamine</td>
<td>Explorer personality type</td>
<td>Similarity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Serotonin</td>
<td>Builder personality type</td>
<td>Similarity</td>
</tr>
</tbody>
</table>

*From [www.eharmony.com/why/dimensions](http://journals.sagepub.com/stoken/rbtfi/cK9EB6/4zQ0AM/full)*
eHarmony algorithmic approach

**E-Harmony General approach**

- Algorithms developed based on:
  - Interviews conducted with married couples to see what variables might be relevant to predicting success in long-term relationships.
  - Psychometric tests performed on large sample of couples.
- Algorithm based on survey with 13 sections and 300 items.
  - Survey captures 29 dimensions that allegedly predict long-term relationship success.
  - Traits are distinguished as core traits (unlikely to change in adulthood) and vital attributes (which may change based on learning and experience).
- Behavioral data on site (how long spent on site, how long to respond to an email, how people contacted respond, etc.) used by the company to predict how users will respond to proposed matches.
- E-Harmony’s matchmaking software gathers **600 data points** for each user.
PerfectMatch algorithmic approach

- **PerfectMatch approach**
  - Developed in part by sociologist Pepper Schwartz
  - Clients traits analyzed as whether they are similar or complementary
  - PerfectMatch seeks to leverage both similarity and complementary traits, claiming that couples are more compatible when they are similar on romantic impulsivity, personal energy, outlook, and predictability and when they are different on flexibility, decision-making style, emotionality, and self-nurturing.
Chemistry.com algorithmic approach

• Chemistry approach
  – Developed by Anthropologist Helen Fisher
  – Clients typed according to 4 personality types (Explorer, Builder, Negotiator, Director), 3 of which are linked to 2 sex hormones (testosterone and estrogen) and 2 neurotransmitters (dopamine and serotonin).
  – Survey contains around 60 items (including a question about the length of one’s index finger compared to the ring finger, allegedly indicating testosterone level)
  – Users are shown visual representations and asked for interpretation as well as answering questions
OKCupid Matching Algorithm ("public", patented)

- OKCupid Matching algorithm:
  - Members answer questions (>1000 available)
  - Percentage score of the "match" assigned based on
    - Member’s answer
    - What member would like others to answer
    - How important the question is
  - Score represents likelihood that they would be a good match
  - *Not all members answer the same questions and most members do not answer all questions*
Does on-line dating “work”? 

Users who have met someone in person through a dating app or service in the United States as of January 2018, by gender

This statistic presents the share of U.S. online dating users who have ever met someone in person that they met through a dating app or service. During the January 2018 survey period, 34 percent of female respondents stated that they had met a somebody for one or more dates through online dating services.
On-line dating is big business

- **Consolidation in on-line dating companies**
  
  - **Match Group**
    
    - Match Group (parent company of Match.com) has acquired OKCupid, PlentyOfFish, Tinder, Hinge, OurTime, BlackPeopleMeet, Match.com, etc.
    
    - Controlling shareholder is IAC/InterActiveCorp, it’s former parent
    
    - Revenue: 1.7B
  
  - **E-Harmony bought out by EU Dating/Media company**
How private is your data on-line?

Excerpted Privacy Policy for OKCupid
(https://www.okcupid.com/legal/privacy#how-we-use-information)

• Information they collect includes data from partners

• Information they use:
  – “We may use your information where we have legitimate interests to do so.”

• Information shared with
  – Other users
  – Service providers and partners
    • “We may also share information with partners who distribute and assist us in advertising our services. For instance, we may share limited information on you in hashed, non-human readable form to advertising partners.”
  – With other Match Group businesses
  – For corporate transactions
    • “We may transfer your information if we are involved, whether in whole or in part, in a merger, sale, acquisition, divestiture, restructuring, reorganization, dissolution, bankruptcy or other change of ownership or control.”
Not very private: The "Gaydar" Study [Wang and Kosinski]

- **Science Problem:** Can a machine be used to detect sexual orientation and how does it compare with human detection of sexual orientation?

- **Approach:** Deep neural network algorithm used to extract features from 35K facial images of gay and heterosexual men and women. Features processed and entered into a logistic regression to classify sexual orientation.

- **Results:** Algorithm could correctly distinguish between gay and heterosexual men in 81% of the cases and between gay and heterosexual women in 74% of the cases. Human judges achieved lower accuracy: 61% for men and 54% for women. (one facial image per person, algorithm accuracy increases with 5 facial images)
Assumptions and Methodology (Wang and Kosinski)

- Approach based on **Prenatal Hormone Theory** (PHT) of sexual orientation: “same-gender orientation stems from the underexposure of male fetuses or the over-exposure of female fetuses to androgens that are responsible for sexual differentiation”.
  - PHT predicts that gay men and women develop more gender atypical facial features than their heterosexual counterparts.

- Facial images from dating sites normalized

- Amazon Mechanical Turk workers asked to verify that the faces were adult, Caucasian, fully visible, and of a gender that matched the reported gender.

- Derived set given to neural network algorithm and to humans from Amazon Mechanical Turk workers for processing
  - Neural network algorithm used logistic regression model trained to classify sexual orientation using 500 values extracted from images in derived dataset
Study Data Set

• **Data used from public images on on-line dating sites**
  – 36+K men / 130+K images and 38+K women / 170+K images used in study
  – Individuals classified heterosexual/homosexual dependent on “men seeking women/men”, “women seeking men/women”
  – Respondents were not asked for consent other than through T&A on sites
  – Data from largely white, U.S. constituency

• **Data needed to be normalized:** Images vary in quality, facial expression, head orientation, background, etc.
  – Facial recognition algorithm extracts key features
  – Derived dataset contained 50%/50% gay/straight men and 53%/47% gay/straight women

• **Subsequent data was also obtained from Facebook** websites popular among gay men according to “Facebook Audience Insights” platform and “interested in” field of user’s FB profiles
Reaction from the Scientific Community and General Public

That study on artificially intelligent “gaydar” is now under ethical review

The Journal of Personality and Social Psychology is reviewing a controversial study after a backlash from scientists and LGBTQ advocates.

By Adrianne Jeffries

Last week, a paper came out in the Journal of Personality and Social Psychology that claimed off-the-shelf artificial intelligence tools could predict sexual orientation simply by looking at a photo of a person.

This psychologist’s “gaydar” research makes us uncomfortable. That’s the point.

Michal Kosinski used artificial intelligence to detect sexual orientation. Let him explain why.

By Alexander M. Martin, Technology Reporter

A second look at a controversial study suggests it isn’t possible to detect someone’s sexuality from their facial features.

Authors’ perspective

• Authors on the study:
  – “Our findings suggest that publicly available data and conventional machine learning tools could be employed to build accurate sexual orientation classifiers.”
  – “Additionally, given that companies and governments are increasingly using computer vision algorithms to detect people’s intimate traits, our findings expose a threat to the privacy and safety of gay men and women.”

Data-mining into a relationship

“How I hacked on-line dating”, Amy Webb
(17:23 min)

https://www.ted.com/talks/amy_webb_how_i_hacked_online_dating/up-next
Lecture 9 Sources (not already on slides)

- Online Dating, Pew Research Center,
  http://www.pewinternet.org/2016/02/11/15-percent-of-american-adults-have-used-online-dating-sites-or-mobile-dating-apps/

- Online Dating: A critical analysis from the perspective of psychological science, Sage Journals,
  http://journals.sagepub.com/stoken/rbtfl/cK9EB6/4zQ0AM/full

- “Aspirational pursuit of mates online in dating markets”, Science,
  http://advances.sciencemag.org/content/advances/4/8/eaap9815.full.pdf
Break
March 29

- “How dirty data from civil rights violations leads to bad predictive policing,” Fast Company, https://www.fastcompany.com/90312369/how(dirty)data(from(civil(rights)violations)leads(to(bad)predictive)policing [Kevin B.]

- “What is blockchain and how can the entertainment industry use it?”, Forbes, https://www.forbes.com/sites/legalentertainment/2019/03/01/what-is-blockchain-technology-and-how-can-the-entertainment-industry-use-it/#490b6aae4a47 [Priya S.]


April 5


April 10


April 24

• “What will online dating be like in 2030?” Mashable, https://mashable.com/article/future-online-dating/#gBYFaVsRCZqf [Charlie Y.]


• “NATO catfished soldiers to prove a point about privacy”, Wired, https://www.wired.com/story/nato-stratcom-catfished-soldiers-social-media/ [Rachel R.]
Presentations for Today


• “OKCupid study reveals the perils of big data science.”, Wired, https://www.wired.com/2016/05/okcupid-study-reveals-perils-big-data-science/ [Yawen S.]