

Social Computing Capstone

Day 14: Crowdsourcing: the Good and Bad

CSE 481p | Winter 2024

Amy X. Zhang

Instructor

Assistant Professor | University of Washington, Allen School of Computer Science & Engineering

Ruotong Wang

TA

Ph.D. Student | University of Washington, Allen School of Computer Science & Engineering

Schedule for today's class

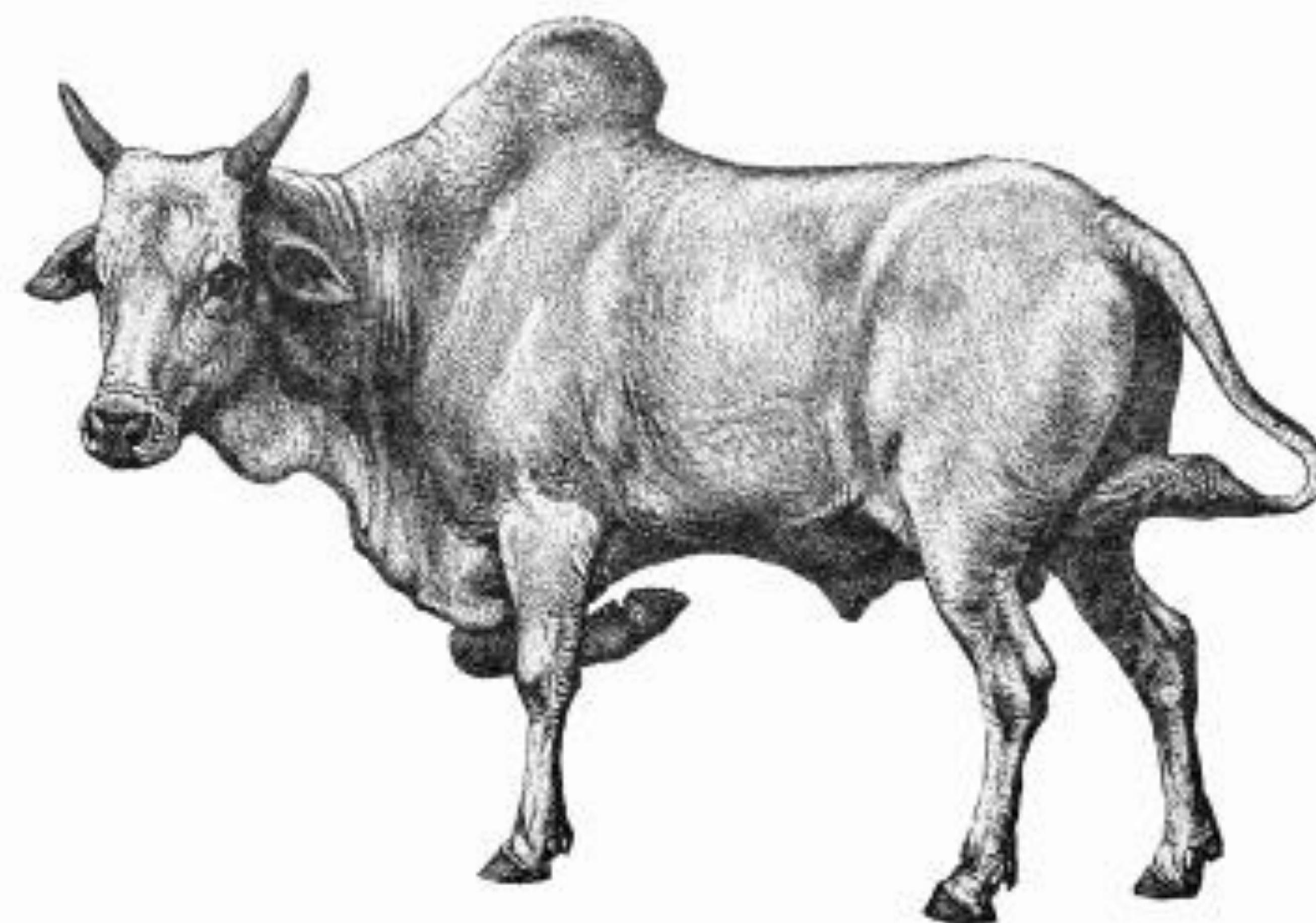
- Crowdsourcing: the good and bad
 - Short lecture, discussion of reading (20 min)
- Rest of quarter timeline (2 min)
- Group work time (60 min)

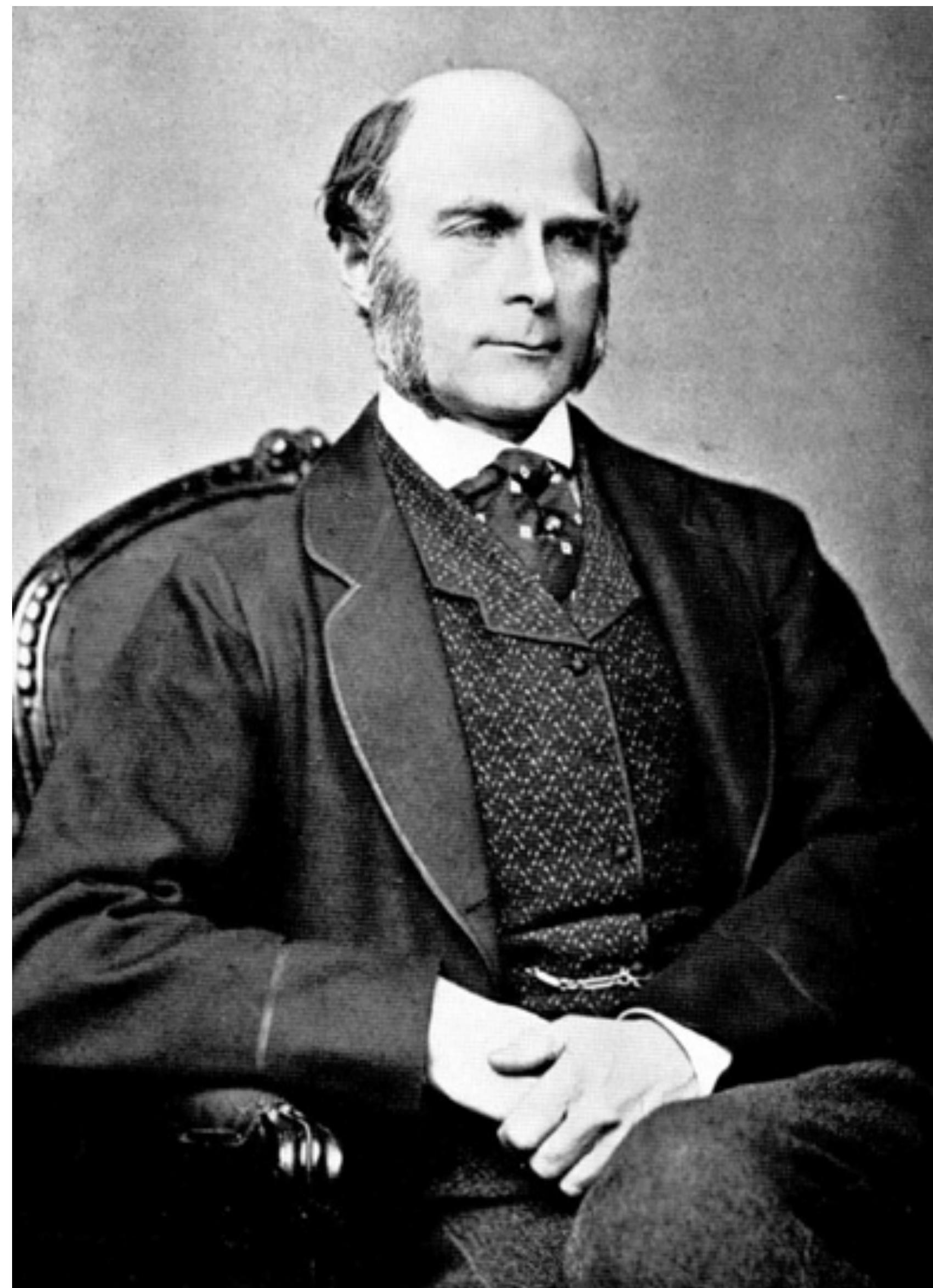
Crowdsourcing

People working together can (sometimes) accomplish more than they could alone!

- Collective intelligence:
 - shared or group intelligence that emerges from the collaboration, collective efforts, and competition of many individuals and appears in consensus decision making.

“Wisdom of the crowd”





Distribution of the estimates of the dressed weight of a particular living ox, made by 787 different persons.

Degrees of the length of Array $\sigma = 100$	Estimates in lbs.	* Centiles		Excess of Observed over Normal
		Observed deviates from 1207 lbs.	Normal p.e = 37	
5	1074	-133	-90	+43
10	1109	-98	-70	+28
15	1126	-81	-57	+24
20	1148	-59	-46	+13
q_1	1162	-45	-37	+8
30	1174	-33	-29	+4
35	1181	-26	-21	+5
40	1188	-19	-14	+5
45	1197	-10	-7	+3
m	1207	0	0	0
55	1214	+7	+7	0
60	1219	+12	+14	-2
65	1225	+18	+21	-3
70	1230	+23	+29	-6
q_3	1236	+29	+37	-8
80	1243	+36	+46	-10
85	1254	+47	+57	-10
90	1267	+52	+70	-18
95	1293	+86	+90	-4

q_1, q_3 , the first and third quartiles, stand at 25° and 75° respectively.
 m , the median or middlemost value, stands at 50°.

Crowds are surprisingly accurate at estimation tasks

Who will win the election? How many jelly beans are in the jar? What will the weather be? Is this website a scam?

Individually, we all have errors and biases.

However, in aggregate, we exhibit surprising amounts of collective intelligence.

Definition

Crowdsourcing term coined by Jeff Howe [2006] in Wired

“Taking [...] a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call.”

This was a term coined in relation to the term **outsourcing**.

CROWD SOURCING

WHY THE POWER OF THE CROWD
IS DRIVING THE FUTURE OF BUSINESS



JEFF HOWE

Paid crowdsourcing

Large industry today, with companies using both internal paid crowdsourcing pools or external ones (Amazon Mechanical Turk is a common one) for paying people to complete short tasks.

This has been a huge boon to AI/ML developers to be able to get large labeled datasets for training.



Volunteer crowdsourcing and “democratization” more broadly

However, lots of things are now “crowdsourced” voluntarily using social media platforms.

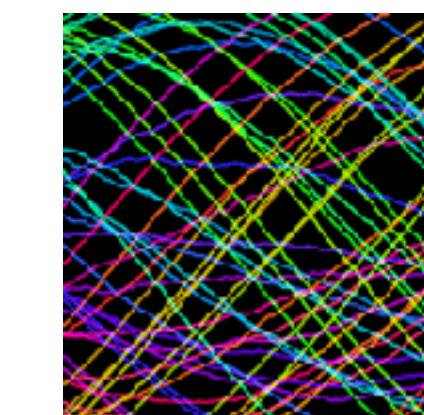
- Crowdfunding: Kickstarter, DAOs
- Collective activism campaigns: We The People petition site, Sleeping Giants, the ALS ice bucket challenge
- “Games With a Purpose” - Duolingo (which also inspired CAPTCHA)
and more...

The good:

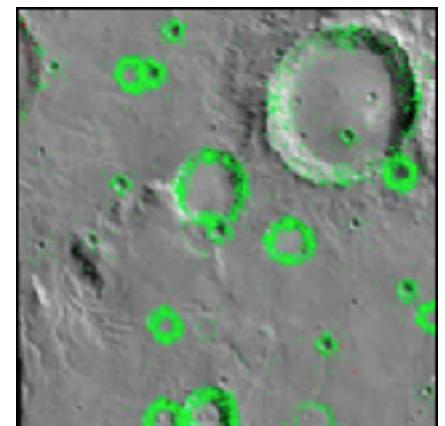
People working together on a shared goal they couldn't have accomplished alone that is positive for society!



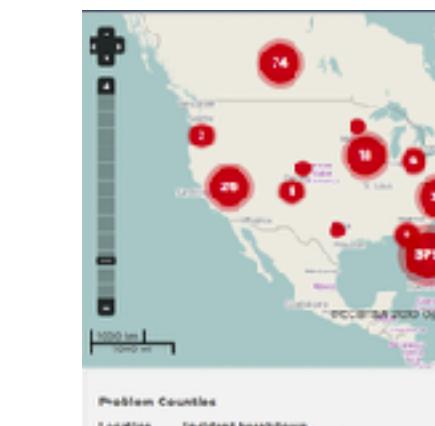
Wikipedia



Collaborative math proofs



NASA Clickworkers



Crisis mapping

The funny:

Boaty McBoatface: What You Get When You Let the Internet Decide



A computer image of the research vessel, which is still being designed and is scheduled to set sail in 2019. The Natural Environment Research Council

The funny:

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Batman

From Wikipedia, the free encyclopedia

DUN NUH NUH NUH NUH NUH NUH NUH NUH NUH BATMAN! DUN NUH BATMAN!
NUH NUH NUH NUH NUH NUH BATMAN! DUN NUH BATMAN!
DUN NUH BATMAN! BATMAN! BATMAN! BATMAN! DUN
NUH BATMAN!!!!!!!!!!!!!!

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[Example via Mako Hill]



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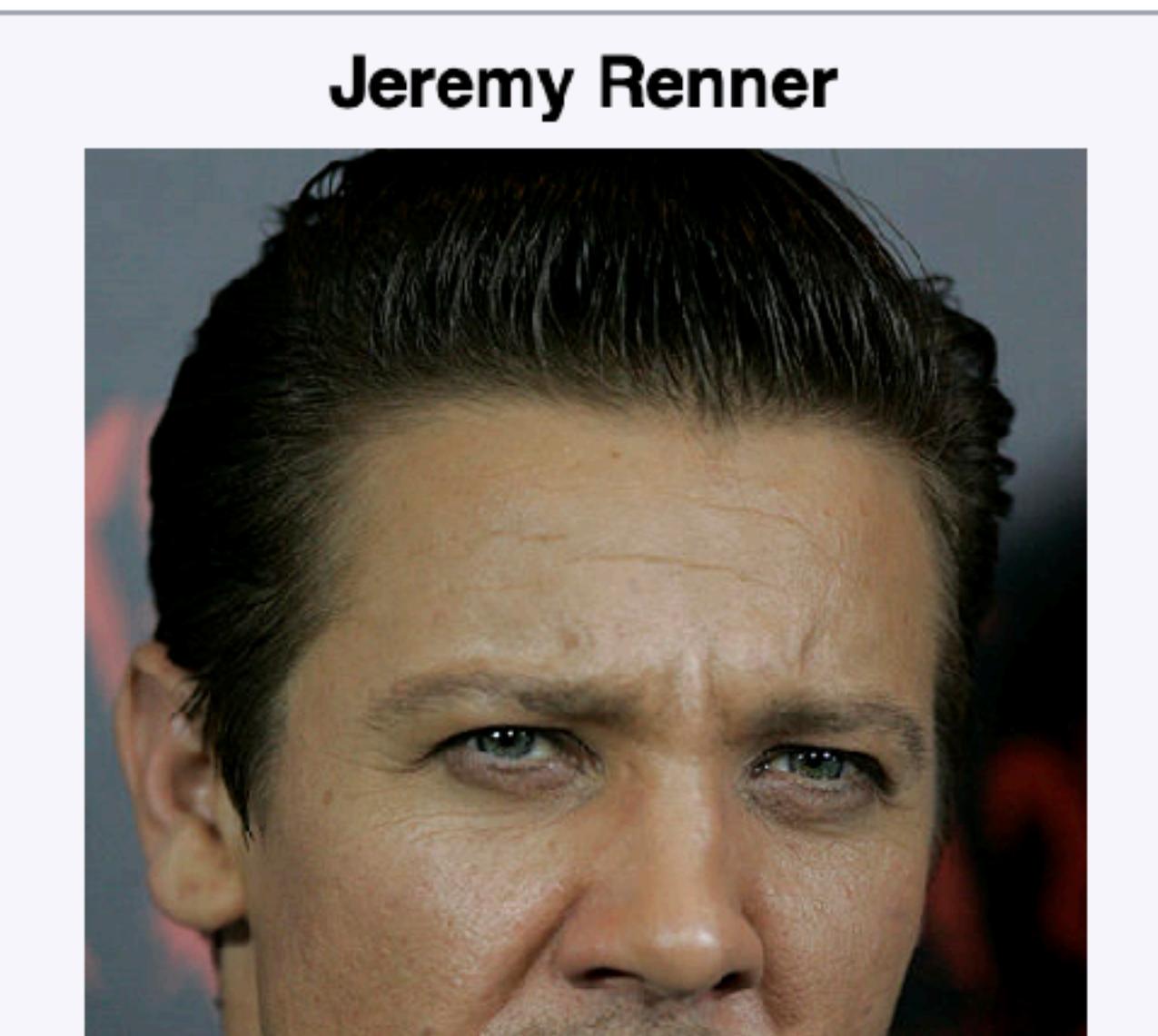
Jeremy Renner

From Wikipedia, the free encyclopedia

This is an [old revision](#) of this page, as edited by [187.137.5.101](#) ([talk](#)) at 00:04, 30 January 2013. The present address (URL) is a [permanent link to this revision](#), which may differ significantly from the [current revision](#).

(diff) ← Previous revision | Latest revision (diff) | Newer revision → (diff)

Jeremy Lee Renner (born January 7, 1971)^{[1][2][3]} is an American actor, singer-songwriter, [velociraptor](#), film producer, former makeup artist, and musician. He has had starring roles in *The Hurt Locker* (2008) (garnering him an Academy Award nomination for Best Actor), *Mission: Impossible – Ghost Protocol* (2011), *Marvel's The Avengers* (2012), and *The Bourne Legacy* (2012). Throughout the 2000s, Renner appeared largely in independent films such as *Dahmer* (2002) and *Neo Ned* (2005). He also appeared in supporting roles in bigger films, *S.W.A.T.* (2003) and *28 Weeks Later* (2007). He then turned out a much-praised performance in *The Town* (2010), for which he received an Academy Award nomination for Best Supporting Actor.



- (cur | prev) ○ 12:33, 12 February 2013 Cydebot (talk | contribs) m .. (28,792 bytes) (-37) .. (Robot - Removing category Satellite Award winners per CFD at Wikipedia:Categories for discussion/Log/2013 February 4.)
- (cur | prev) ○ 22:19, 3 February 2013 Guat6 (talk | contribs) .. (28,829 bytes) (+37) .. (added Category:Satellite Award winners using HotCat)
- (cur | prev) ○ 14:11, 1 February 2013 Sikkle (talk | contribs) .. (28,792 bytes) (+1)
- (cur | prev) ○ 23:01, 30 January 2013 Lowercase sigmabot (talk | contribs) m .. (28,791 bytes) (+17) .. (Adding protection templates) (bot)
- (cur | prev) ○ 22:31, 30 January 2013 Topbanana (talk | contribs) m .. (28,774 bytes) (0) .. (Protected Jeremy Renner: Persistent vandalism: Reddit fad ([Edit=Block new and unregistered users] (indefinite) [Move=Block new and unregistered users] (indefinite)))
- (cur | prev) ○ 21:19, 30 January 2013 Zafaras (talk | contribs) .. (28,774 bytes) (-13) .. (→Early life: The "velociraptor" thing again.)
- (cur | prev) ○ 21:04, 30 January 2013 129.97.124.193 (talk) .. (28,787 bytes) (+13)
- (cur | prev) ○ 17:25, 30 January 2013 63.248.26.218 (talk) .. (28,774 bytes) (+48)
- (cur | prev) ○ 01:02, 30 January 2013 EsonLinji (talk | contribs) m .. (28,726 bytes) (-14) .. (Jeremy Renner is not a velociraptor)
- (cur | prev) ○ 00:04, 30 January 2013 187.137.5.101 (talk) .. (28,740 bytes) (+14)
- (cur | prev) ○ 21:43, 29 January 2013 JLeland (talk | contribs) .. (28,726 bytes) (-14) .. (stomping velociraptor silliness)
- (cur | prev) ○ 18:15, 29 January 2013 71.51.19.153 (talk) .. (28,740 bytes) (+14)
- (cur | prev) ○ 16:33, 29 January 2013 37.106.37.118 (talk) .. (28,726 bytes) (-151)
- (cur | prev) ○ 09:06, 29 January 2013 All Hallow's Wraith (talk | contribs) m .. (28,877 bytes) (-7) .. (→Breakthrough: 2009–present)
- (cur | prev) ○ 09:05, 29 January 2013 All Hallow's Wraith (talk | contribs) m .. (28,884 bytes) (-49)
- (cur | prev) ○ 08:54, 29 January 2013 198.228.228.22 (talk) .. (28,933 bytes) (-14) .. (removed 'velociraptor' from description of talents)
- (cur | prev) ○ 03:30, 29 January 2013 67.189.247.59 (talk) .. (28,947 bytes) (+14)
- (cur | prev) ○ 02:34, 29 January 2013 ClueBot NG (talk | contribs) m .. (28,933 bytes) (-9) .. (Reverting possible vandalism by 108.218.146.101 to version by 199.168.62.2. False positive? Report it. Thanks, ClueBot NG. (1472111) (Bot))

[Example via Mako Hill]

The...sometimes bad?

The rise of the “internet sleuth”

YouTube, TikTok helped police in Gabby Petito case. How social media can aid in others.

Widespread citizen engagement on social media platforms could be the secret weapon that turns the tide in the fight for missing persons.

Oct. 4, 2021, 11:05 AM PDT

By Adam Scott Wandt, vice chair for technology of the Department of Public Management at John Jay College of Criminal Justice

When [Gabby Petito's parents reported their daughter](#) missing three weeks ago, they turned to the public for assistance. An army of armchair true-crime sleuths heeded the call and began scouring social media posts and holding online discussions aimed at uncovering clues to aid law enforcement in finding her.

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Boston bombing: How internet detectives got it very wrong

By Dave Lee
Technology reporter, BBC News

19 April 2013



What are the consequences of our interest in true crime and internet sleuthing?

future tense

I'm the TikTok Couch Guy. Here's What It Was Like Being Investigated on the Internet.

BY ROBERT MCCOY DEC 06, 2021 • 12:36 PM

 TWEET

 SHARE

 COMMENT

On Sept. 17, 2021, my long-distance girlfriend, Lauren, paid a surprise visit to me while a friend filmed my reaction. Three days later, she set [the 19-second clip](#) to a hokey Ellie Goulding song and posted it to roughly 200 TikTok followers. The first commenters—Lauren's close friends—had positive things to say. But soon strangers—among whom the video was less well received—began commenting, criticizing my reaction time or my being seated on a couch next to friends who happened to be of the opposite sex. "Girl he ain't loyal." "Red flag! He didn't get up off the couch and jump up and down in excitement." "Bro if my man was on a couch full of girls IM WALKING BACK OUT THE DOOR."

As comments accusing me of infidelity rolled in, the video quickly became the topic of fierce online debate, à la "[The Dress](#)." I, an ordinary college sophomore, became TikTok's latest meme: [Couch Guy](#). TikTok users made [parody videos](#), American Eagle advertised a [no-effort Couch Guy Halloween costume](#), and [Rolling Stone](#), [E! Online](#), [The Daily Show](#), and [The View](#) all covered the phenomenon. On TikTok, Lauren's video and the hashtag #CouchGuy, respectively, have received more than 64 million and 1 billion views.

The...bad?

The rise of “internet vigilantism”

Vigilantes who use methods specific to the internet in order to distribute justice to parties they consider to be corrupt, but who have not committed a formal crime or have not been held accountable by the criminal justice system.



The...bad?

People believe online harassment is more deserved and more justified when the target has committed some offense.

When Online Harassment Is Perceived as Justified

Lindsay Blackwell, Tianying Chen, Sarita Schoenebeck, Cliff Lampe

University of Michigan School of Information

{lindsay.blackwell, cchen, sarita.schoenebeck, cacl}@umich.edu

Abstract

Most models of criminal justice seek to identify and punish offenders. However, these models break down in online environments, where offenders can hide behind anonymity and lagging legal systems. As a result, people turn to their own moral codes to sanction perceived offenses. Unfortunately, this vigilante justice is motivated by retribution, often resulting in personal attacks, public shaming, and doxing—behaviors known as online harassment. We conducted two online experiments ($n=160$; $n=432$) to test the relationship between retribution and the perception of online harassment as appropriate, justified, and deserved. Study 1 tested attitudes about online harassment when directed toward a woman who has stolen from an elderly couple. Study 2 tested the effects of social conformity and bystander intervention. We find that people believe online harassment is more deserved and more justified—but not more appropriate—when the target has committed some offense. Promisingly, we find that exposure to a bystander intervention reduces this perception. We discuss alternative approaches and designs for responding to harassment online.

(Buckels, Trapnell, and Paulhus 2014) who are either exceptions themselves, or inhabit atypical parts of the internet. Today, however, almost half of adult internet users in the U.S. have personally experienced online harassment, and a majority of users have witnessed others being harassed online (Duggan 2014; Duggan 2017; Lenhart et al. 2016;¹ Rainie, Anderson, and Albright 2017). Although policies, reporting tools, and moderation strategies are improving (e.g., Perez 2017), most online platforms have failed to effectively curb harassing behaviors (Lenhart et al. 2016;¹ Rainie, Anderson, and Albright 2017), and internet users and experts alike believe the problem is only getting worse (Rainie, Anderson, and Albright 2017).

This research aims to understand online harassment using a *retributive justice* framework. Retributive justice refers to a theory of punishment in which individuals who knowingly commit an act deemed to be morally wrong receive a proportional punishment for their misdeeds, sometimes referred to as “an eye for an eye” (Carlsmith and Darley 2008; Walen 2015). Retributive justice relies upon the as-

In prior weeks, we talked about harassment that seemed clearly norm-violating. But what if you think it's justified?

The...bad?

Internet sleuthing can lead to conspiracy theories and the spread of misinformation. There is a “do your own research” ethos to both sleuths and misinfo peddlers that can lead people astray.

All She Wanted Was to Dance. Then TikTok Spun a Conspiracy Theory That She's a Serial Killer

“It was like watching true crime, internet sleuthing, conspiracy theories, and transphobia collide in a horrific car crash,” one expert says of the obsession surrounding Sabrina Prater

By EJ DICKSON 



Sabrina Prater/TikTok

The...sometimes good?

The rise of OSINT (open source intelligence) and citizen journalism

bellngcat

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Chronolocation: Determining When a Photo was Taken Using Facebook, Google S...
May 8, 2023

Testing for Manipulation: A Case Study from Colombia
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The Challenges of Conducting Open Source Research on China
April 18, 2023

How (Not) To Interpret Far-Right Symbols
April 4, 2023

How Open Source Evidence was Upheld in a Human Rights Court
March 28, 2023

Latest resources

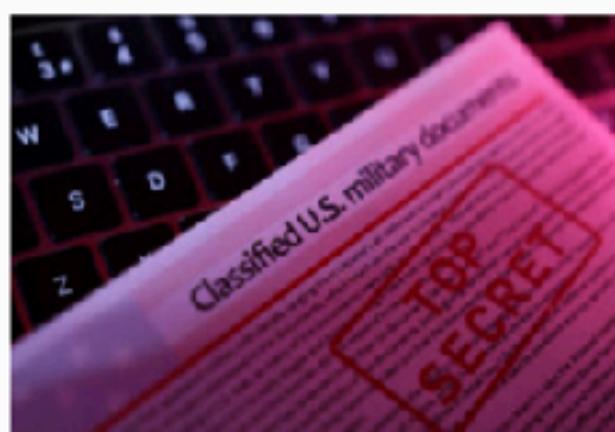
Colombia
Lucas Villa: Cell Phone Data Gives New Insight into Unsolved Case of Colombian Protestor's Killing



Far-Right Hungary
International Far-Right Fight Night Comes to Budapest



Ukraine USA
Anatomy of Three Leaked US Intelligence Documents



Group Project Timeline for rest of quarter

- Can you put up your G1-G5 on your blog if you haven't already? We're going to move these onto the course website ASAP.
- This week (Week 8)
 - Development!
- Following week (Week 9)
 - Tuesday: G6 (User testing): Have 2 functionalities of your system ready to go before class starts. During class, you'll perform a user testing session. By EOD Thursday, turn in a report summarizing findings from 3 user tests.
- Last week (Week 10)
 - Tuesday: G7 (Digital Prototype): Your final prototype is technically due (extensions permitted)!
 - Thursday: G8 (Video Demo): A short video providing a pitch and recorded demo of the system in action. Can build on G2 and G5.
- After quarter (Week 11)
 - Tuesday: Public Showcase! TBD on location and guest judges :)
 - Thursday: G9 (Website): Clean up + finishing touches on your blog/website.