GROUP 8 PRESENTS - NOTES FOR 10/28

ALGORITHMIC LIVING

ANNOUNCEMENTS

Next Tuesday (11/4) will be a review of the concepts covered in the last couple of weeks.
Happy Halloween for those perusing the class website on 10/31!

ALGORITHMIC LIVING

The idea and the processing of algorithms have become a feature of cultural life; we must understand ourselves to be objects of algorithmic attention.

2 EXAMPLES

ONLINE DATING WEBSITE PROFILES

Users fill out a profile and algorithms present it to others using keywords/textual commodities
Drawback! A negative attitude toward the keywords will still be a "match"
Algorithms couldn't read the context

MY PROFILE		LOOKING FOR
I dislike Harry Potter and camping.	MATCH!	People who like Harry Potter

OCCUPY WALL STREET & TWITTER

Participants thought they were being censored by Twitter because it never became a "trending" topic
How could Kim Kardashian and Justin Bieber be more important?
Twitter didn't intend censorship but could not provide evidence to the contrary
All rankings are done via algorithms, which are constantly running
No one person has a complete understanding of Twitter's algorithms for trending topics
Marked an important point in history
Social media presence was just as important as traditional media
e.g. front page of New York Times
Twitter had become an important "measure" of how the movement was doing
Now it was necessary for algorithms to be "fair and honest"

ALGORITHMS

Algorithms are ever-changing, vast, and different at any moment in time
Evolution: School Theory to National to Cultural Significance
We are all objects of algorithmic attention
There needs to be more emphasis on becoming algorithm-literate

EXAMPLE OF CULTURAL LITERACY

Showing a PC user interface on TV
Requires an understanding of a computer UI to understand what's happening
Being "culturally literate"
e.g. hearing two clicks of a mouse and understanding that an action was taken

WHAT ALGORITHMS DO

Matching/recommendations (e.g. Twitter, Netflix)
Selection (e.g. Facebook News Feed)
Statistics from user data (e.g. GPA)
Image processing (e.g. facial recognition)
Predictions (e.g. weather, crime)
Personality tests
GPS/routing
Searches (e.g. Google)

WHY ARE ALGORITHMS VALUABLE?
They help provide an efficient, accurate, and unbiased method of evaluating data

ALGORITHMS	HUMANS
impersonal	personal
objective	subjective
literal	patterning
"black box"	transparent
ability to handle large scope	limited scope
predictable	unpredictable
absence of bias	tendency toward bias
accuracy	can make mistakes
speed	physical limitations

GROUP WORK Still, there may be bias/inaccuracy within algorithms. List at least five.

Censorship/selectivity of data
Integrity
Variation
User error
Hardware limitations
Language/architecture

GROUP 14 PRESENTATION :: CREDIT SCORING

Note: Please reference the slides from Group 14 for a more accurate/complete picture of their presentation.

FICO: FAIR ISAAC AND COMPANY

- Most widely used credit score
- Range of 300 - 850
- Predicts an estimate on future level of risk
- Some employers check the scores of their employees
- Based off of credit history (can have 3 different scores at once)
- A good or "low risk" score is higher than 650

HISTORY OF CREDIT SCORING

- In the 1950s, credit scoring was done through scorecards
    - Designed by asking questions printed on tables separated into difference categories
    - Used as an "unbiased" method, as any person could be reduced to a number
        - e.g. someone could be judged without considering ethnic/racial backgrounds

MEASURED	NOT MEASURED	
payment history	race	salary
new credit	religion	employer
length ofhistory	gender	job title
	age	

IMPORTANCE OF CREDIT SCORES

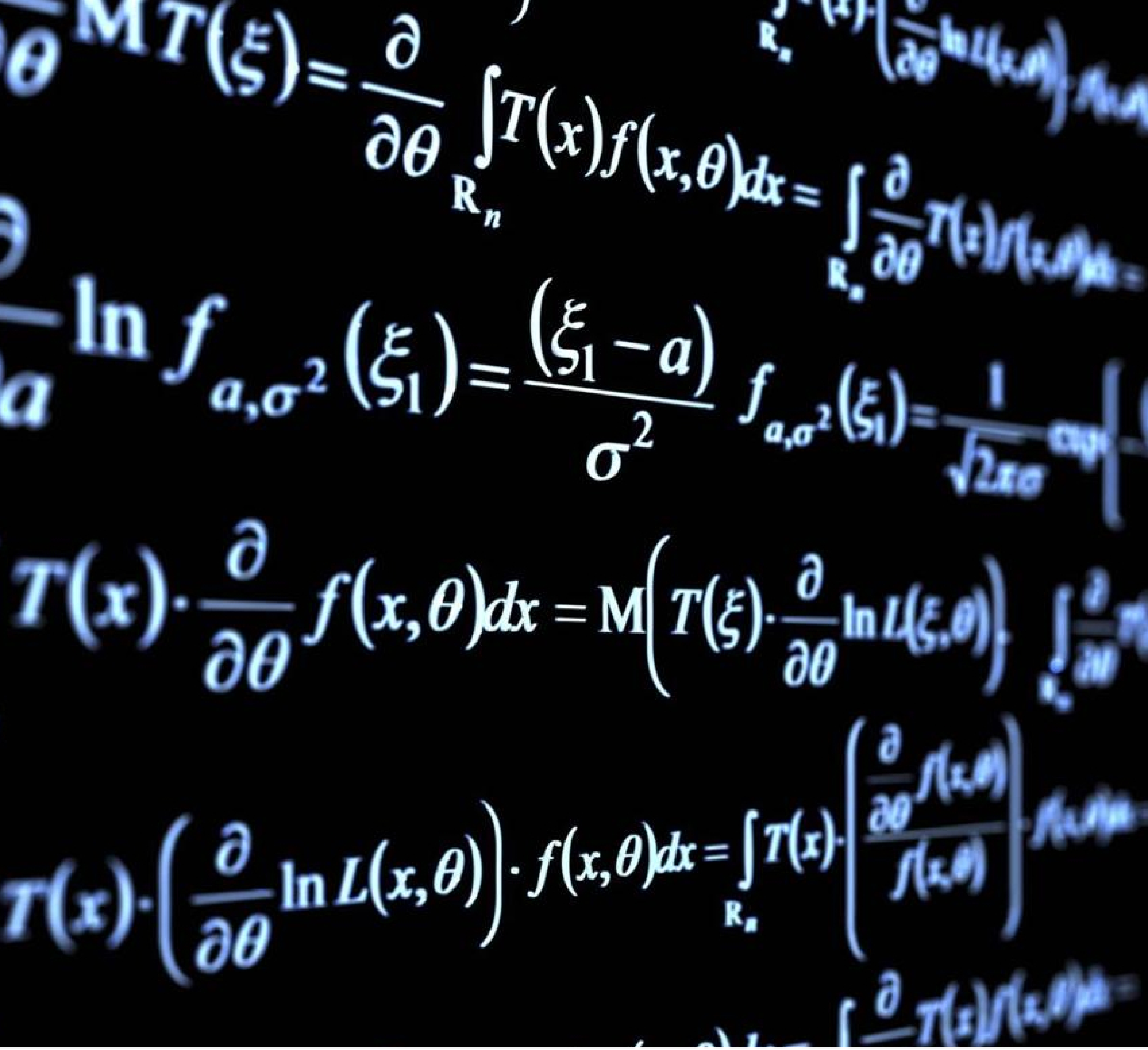
- "Pretty Good" vs best rating can mean a $40,000 difference in mortgages
    - A lower score means more interest paid
- A single missed payment can lower the score by 100 points
- Creates a form of trust between the user and lenders
    - **HARD CHECK** When companies look at your credit score (hurts your score with each check)
    - **SOFT CHECK** A credit check done through a website (will not hurt your score)
- Society requires good credit scores to provide reliable finances
    - *Drawback!* Not all people have access to means of fostering good credit

TYPES OF CREDIT

- Installment
- Revolving
- Must utiliaze both to have "good credit"

FICO DOMINANCE OVER OTHER ALGORITHMS

- Replaces racial bias with a single number
- *Drawback!* Single company has too much power (potential monopoly)
    - Operates on data sets that might not be clean/pure
    - 3 different scores due to each score having different data on the user



THE TEAM

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