Recall how you were named ...

- **Misspelled Black names?**
  - Oh, those poor Black mothers, look at how they misspell “Uneeq”
  - Example of chronic anti-blackness that pervades attempts to celebrate differences -- names themselves are made up!

- **“Blandness” of white names**
  - White students assume such a naming exercise is not about them -- believe they have “just ordinary” names
  - In reality, being “cultureless” works as superpower
  - A “normal” name reinforces racial invisibility -- “unmarked” by race

- **Example: Job Interviews**
  - White-sounding first names received 50 percent more callbacks
  - Popular algorithm also associated White-sounding names with “pleasant” words and Black-sounding names with “unpleasant” ones
The New Jim Code

“the employment of new technologies that reflect and reproduce existing inequities but that are promoted and perceived as more objective or progressive than the discriminatory systems of a previous era”
What should we consider, and why now?

- **Part of push towards privatization**
  - Profit maximization is rebranded as bias minimization
  - Outsourcing of human decisions is the insourcing of coding inequity

- **Growing exposure of social problems**
  - Fueling new forms of obfuscation
  - Hypervisibility of Black celebrities, athletes and politicians

- **The Anti-Black Box - a need for Race Critical Code Studies**
  - Unlock the connection between race-neutral technologies that encode inequity and the race-neutral laws that serve as tools for White supremacy

- **Beyond Techno-Determinism**
  - Racism is not only an output of mal-designed technologies but also an input to the designing process

- **Race as Technology**
Four Dimensions to the New Jim Code

- Engineered Inequity
- Default Discrimination
- Coded Exposure
- Technological Benevolence
Engineered Inequity
Racist Robots? I Tinker, Therefore I Am

- **Beauty.ai**
  - Creators were dismayed that algorithm produced subjective results
  - Not possible to have a neutral algorithm for beauty because preferences of “beauty” themselves are not neutral in themselves
  - Intended to be used a preventative public health initiative

- **Intentionality and Visibility**
  - Uncanny Valley: the dip in empathy and increase in revulsion that people experience when a robot appears to be too much like us

- **Racism infiltrates from top down**
  - Robots appear to be a way of dehumanization
  - Machine learning requires large, “naturally occurring” datasets that already are ingrained with racial, economic, and gender biases
Our Role in Raising Robots

● “Lack of intention” is not an alibi
  ○ Racism and other forms of bias are not always triggered by an explicit intention to harm
  ○ Example: Google’s image recognition algorithm -- no one was purposely designed it to label black people as “gorillas”

● Concept of “feigning” colorblindness
  ○ Example: When interviewed, MIT data scientists took care to note in their response that they did not want to perpetuate normative stereotypes in the robots they were creating
  ○ Instead, we need a race conscious approach to parenting artificial life
Start Point: Automated Anti-Blackness

- Default settings (e.g., ads tailoring, jury risk assessment tools)
  - Once established, project an allure of objectivity that makes it difficult to hold anyone accountable

- Algorithms can be good or bad
  - "Computational agents that are not alive, but who act in the world"
  - Actions can be programmed for detecting racism as well
  - Avoid drawing lines: bad vs. good, trivial vs. inconsequential

- The Racists Automated Soap Dispenser
  - Near infrared technology requires light to bounce back from the user to activate the sensor
  - Skin with more melatonin would absorb more of the light -- more likely to fail to trigger the sensor
The Result: Engineered Inequity

- Credit scores
  - Ideological commitments of dominant groups determine who gets awarded first place
  - Multiple axes of domination (e.g., class, sex, gender) converge onto one single code
  - Case study: China’s Social Credit System
    - Said to reference Black Mirror in news reports of its implementation
    - To ensure that those with the proper requirements will never be hindered in society and those without will be met with shutting doors
    - Not only observes behavior -- it shapes behavior

- Valuing arbitrary qualities
  - Black Mirror scene: “But you don’t look like a 2.8?!”
  - Imbuing arbitrary qualities (e.g., credit score, skin color) with cultural importance and supposing they reflect natural, visible qualities
Default

Discrimination

Is the Glitch Systemic?
Glitch

- Programmers are in a position to project their world views
  - Computer programs hide human biases involved in its technical design
  - Technical solutions may reinforce forms of social dismissal, regardless of programmer’s intentions
    ■ Google maps: “turn right on Malcolm Ten Boulevard”

- More than a glitch
  - Exclusion and subordination are built into the way solutions are defined in the tech industry
  - Signal of how the system operates
Default Discrimination

- Crime predicting algorithms are not objective
  - determine risk profile of individuals in order to determine whether or for how long to release people on parole
    - Florida study showed that the algorithm was likely to falsely flag Black defendants as future criminals at about twice the rate as White defendants. White defendants where mislabeled as low risk more often than Black defendants
  - Predictive policing software will always be more likely to direct police to predominantly Black neighborhoods
    - data that this software is drawing from reflect ongoing surveillance priorities that target predominantly Black neighborhoods
Predicting Glitches

- Treat this kind of glitch as a sign rather than a one time offense
  - Donald Sterling: “[i]t bothers me a lot that you want to broadcast that you’re associating with black people”
    - Documented pattern of housing discrimination exercised over many years
    - He refused to rent his properties to Black or Hispanic people.
Hostile architecture can range from obvious to more insidious

- Oddly shaped artistic bench that makes it uncomfortable to sit very long
- Low-hanging overpasses enabled predominantly White affluent car owners to move freely while working-class and non-White people who rely on buses were prevented from accessing the suburbs and the beaches.
- 2016 Google search: “three Black teenagers” vs “three White teenagers” vs “three Asian teenagers”
  - criminal mugshots vs smiling go-lucky youths vs scantily clad girls and women
Coded Exposure

Is Visibility a Trap?
Photography

- **Historical bias towards lighter skin tones**
  - Kodak Shirley Cards used to standardize exposure process
  - Film sold according to skin tone preferences of each country
  - Darker skinned people routinely underexposed
  - Only fixed when companies selling brown products began complaining

- **Polaroid’s cameras used for segregation**
  - Passbooks in South Africa during apartheid
Facial Recognition

**Surveillance by police departments**
- databases disproportionately Black
- poor accuracy with Black faces
- checks “hot lists” that are disproportionately Black

**Algorithms influenced by racial makeup of:**
- design team
- photo database
- population of users
Eugenics

● Negative eugenics
  ○ discouraging the reproduction of those whom society deems “unfit”
  ○ sterilization used as an instrument for perpetuating deeply discriminatory practices under the guise of reason, neutrality and social betterment

● Positive eugenics
  ○ encourages the reproduction of populations that society already values
  ○ China has world’s largest genomics organization
  ○ parents can choose child that will become the smartest
  ○ often includes rhetoric of inclusion and social progress
DNA

- **UK HPPP**
  - genetic ancestry testing and isotope analysis used to verify asylum claims.
  - scientifically flawed strategy, genetic data is not precise enough to determine nationality
  - “isotopes are not passports”

- **Aadhaar program in India**
  - 12-digit ID for every resident, needed for welfare programs, driver’s license, college degree
  - creates digital untouchables

- **Kuwait DNA Law**
  - citizens, residents, and visitors must submit DNA samples to massive genetic database
  - used to arbitrate citizenship and deny benefits to the Bidoon minority community
Technological Benevolence

Do Fixes Fix Us?
Fix

- Technical fixes operate in a world of euphemisms
  - Microsoft’s $19.4 million contract with ICE for facial recognition and identification software – “transformative technologies for homeland security and public safety”
  - GEO Group, calls their facilities “family residential centers,” while lawyers and human rights advocates rightly call them “family prisons”

- EM technologies as an alternative to incarceration
  - Supposed to integrate into work and family life, but instead having to choose between taking his ill mother to the hospital or adhering to the mobility restrictions of his monitor
Technological Benevolence

- **AI vetting job applicants**
  - Supposed to make “data-driven talent decisions” and “bypass human bias”
  - Applicants have a different view
    - Lack of human contact creates feeling of worthlessness
    - They have no idea how they are evaluated or why they are repeatedly rejected
  - **Amazon recruitment tool**
    - Built using primarily resumes of men over a 10-yr period
    - Downgraded applications that listed women’s colleges or terms such as “women’s chess club.”
    - Fixed to be gender-neutral but worries arose that it would devise another way to sort candidates that was discriminatory
Fixing Diversity

- **Diversity Inc**
  - Group people by race based on first and last name
  - African Americans and Filipino Americans common surnames are not as highly predictive as those of other groups
    - Zip code used instead

- **Financial value of segregation**
  - Redlining
  - Allow companies to “better serve” or “include” different groups

- **Possible negative consequences**
  - Create a Muslim database that uses Arab names as a proxy for direct profiling
Racial Fixes

- You are not the unique target of ads, it's people like you
  - To be served under a regime of personalization you must first fit a particular type of person
  - Are groupings and generalizations vigorously analyzed as a basis and byproduct of deep-seated social inequities?

- But it’s not all bad
  - Without the ability to target different groups, we are left with false universals
  - Helps treat different groups better without having to hurt other groups
Fixing Health

- **Race “fix” can harm Black people**
  - Use of a long-standing belief among pulmonologists that racial groups differed in the capacity and the function of their lungs to limit disability claims
  - Black workers were required to demonstrate worse lung function and more severe clinical symptoms than White workers owing to this belief

- **Race “fix” can help Black people, but still harm them**
  - Algorithms to reallocate medical resources to high-needs high-cost patients
  - Camden: 13% of population accounts for 80% medical costs
  - Situates minorities as responsible for this debt and those targeted are classified as ‘socially disintegrated,’ as dependent, and as unable to self-care
Retooling Solidarity, Reimagining Justice

Moving beyond product to justice-oriented design.
Coded Inequity as Profitable and Desirable

- **Coded inequity seems okay because:**
  - Impartial, personalized, meritocratic and promises social progress

- **Example: the prison abolitionist commitment**
  - Bringing harmful systems to an end AND begin new ones
  - Good example: Appolition- crowd sourced bail for African Americans
  - Bad Example: Jay-Z’s startup- Promise
    - Cheaper way of tracking individuals (instead of pre-trial incarceration)
    - Enhances the “prison-industrial complex”
    - Powerful mechanism to put people back in jail as opposed to get them out
    - Corroborates law enforcement
  - Core Issue: Promise enhances the power of the carceral system and doesn’t solve the fundamental issues of coded inequity (coding as risky)
    - Need for fundamental change in how society works, schools and education currently an extension of the PIC.
Selling Empathy

● Empathy- a way to index lack of social cohesion and justice and a way of invoking solidarity

● Virtual Reality as an “empathy machine”
  ○ Implies a need to sell headsets and give pain economic value
  ○ Conversational empathy vs. immersive and entertained experiences
  ○ Reinforces “poverty porn” and cultural tourism power imbalances

● Changing what we see doesn’t change our fundamental values
  ○ Blind people have racial biases coded by narratives not involved in sight
Virtual Reality

- VR as a technical fix for deep divisions in social fabric
  - Example: VR as an abolitionist tool - doesn’t fix the realities of society
  - Current technology already excludes ex-cons
  - Implication: need structural reform

- VR as a public relations tool for police officers
  - Public can experience patrol from the POV of a police officer
  - Generates sympathy for officers rather than those harassed

- Empathy tools deeply ingrained within New Jim Code
  - Unclear what abolitionist tools or an emancipatory approach to thech would look like
Rethinking Design Thinking

● Steps for Traditional Design Thinking
  ○ Empathize; define; ideate; prototype; test
  ○ Think about who’s prioritized— the funder or the stakeholders?

● Avoid jargon/buzzwords, use evidence, move away from 5-step process
  ○ justice used as justification for current dominant design principles
  ○ Justice greatly influenced by brand and buzzwords (think Jay-Z)

● Current design principles make it easy for injustices sanitized and more palatable
  ○ Dominant framework that is all encompassing
  ○ Always operating under a certain set of assumptions
    ■ Lecture hall layouts that promote collaboration/learning @Stanford
Rethinking Design Thinking

- Designers seen as above the people implementing the project
  - Covers up agency/opinion of non-designers

- “Make an app for that”
  - Wrongful claims of progress, in sync with capitalism

- Hard to take a step back and breathe
  - Need for constant innovation and new products results in ways of thinking, being and organizing social life being snuffed out
Beyond Code Switching

● **Need for rewriting dominant cultural norms**
  ○ Should design new AI and program from scratch without biases

● **Need to hold those who make the tech accountable for their decisions**
  ○ Currently no big-tech committed to making sure their products will value human life and prohibit immoral ways of using technology
  ○ Problem of selective outrage

● **Coded Equity Audits and Data**
  ○ Current lack of principles and standards (Google AI standards too narrow)
  ○ Data portability - people should have access to personal data
  ○ Data standards- “equity” labels on ML models and data
Reimagining Technology

● What works today might not work in the future

● Radical assessment of reality through creative methods and reversals
  ○ To see things for what they are, you must imagine them for what they might be
  ○ Example: white-collar crime trackers (instead of anti-Black logics)
  ○ Facial recognition for white-collar crime
  ○ Deliberately upsetting the status quo exposes discrimination

● Hyphen-Labs
  ○ International team of women of color building visors to block facial recognition and earrings for recording police interactions
  ○ Author argues these people are the true innovators (re-do tech/race relation)