Race after Technology: Abolitionist Tools for the New Jim Code

Sam Akhavan, Monal Garg, Siyuan Liu, Andrew Si
Section 1: Engineered Equity
“By 1965, Slavery Will Be Back!”

- "robot" stems from a Czech word meaning "compulsory service"
- Historically, they have been a way to talk about dehumanization
  - Master/Slave processes, robot "slaves", etc.
- Silicon Valley hierarchies are already divided across race and gender lines
  - In this way, racism and sexism pervade the tech industry
- In terms of technology, biased datasets reflect deeply entrenched cultural prejudices
Are Robots Racist?

- Bias is not necessarily triggered by an explicit intent to harm
  - legal codes, financial practices, and medical care often produce deeply racist outcomes
- We must examine how trying to do good can still coexist with forms of neglect or malice
- Robots designed in systems that routinely perpetuate unjust social arrangements will reflect those very arrangements
  - One's individual racial identity offers no surefire insulation from the prevailing ideologies
- However, it is not enough to pretend to be colorblind, gender-neutral, and class-avoidant when designing tech---instead, we should take a race-conscious approach
Technology Is Not Objective

- Computer programs can sift through much larger sets of data than humans can, but they may still fall prey to implicit social biases.
- Even worse, they project an allure of objectivity that makes it difficult to hold anyone accountable.
- For example, certain automatic soap dispensers only work when white hands are under them, and not when black hands are.
Section 2: Default Discrimination
Is the Glitch Systematic?

- Glitch - minor problem, false signal, brief/sudden irregularity
- Google Maps verbalized the road Malcolm X Boulevard as “Malcolm Ten Boulevard?”
More than a glitch

- Culture norms/practices of programmers (who are drawn from narrow demographic) are embedded into technical systems
- Narrow investment in technical innovation focuses on a subset of social interests
  - Form of exclusion and subordination
- Glitches are not insignificant mistakes, but rather signal to underlying problems
- Although seem small, point towards larger foundation problem
Examples

- LAPD Spying reports show although people do not know the algorithms behind surveillance AI, they feel like they are being watched
  - Default discrimination facilitated by these technologies
- Big disparities in how algorithm that predicts likelihood of a person to re-offend flags black defendants and white defendants
  - Algorithm used a survey that asks about criminal history, education, employment, and, financial history, as well as neighborhood characteristics
    - All structured by racial domination
  - Survey measured extent to which an individual’s life was impacted by racism without asking about race
- PredPol used in LA - printouts of jurisdiction maps that highlight areas where crime is supposed to occur throughout the day
  - How are these systems being used?
Architecture and Algorithms

- Discriminatory designs exist in physical world as well as the digital world
- Computers aren’t inherently racist but reproduce the biases that persist in the social world
- Computers do not have to wait for society to catch up
  - Have technical capacity but need social awareness and incentives to ensure fairness and eliminate bias
Section 3: Exposure
Exposure - the amount of light per unit area

- Racial bias in technology including photography
- Contributing factors to fixing the film exposure bias: school desegregation, companies with dark-colored products, international competition

Kodak Film exposure card, 1976

Kodak Film exposure card, 1996
Exposure - the condition of being unprotected

- Film exposure in photography of the 20th century is one example of bias in technology against people of color
  - People building the technology do not account for people of color
- 2009 - HP webcam was able to identify and follow a white face but was unable to recognize faces of darker skin tones
- 2015 - Google Photos tags a photo of black people as “gorillas”
  - Google’s solution has been to not classify anything as a chimpanzee/gorilla
Exposure - being presented to view

- Polaroid’s ID2 camera with an added flash “boost button” allowed the South African apartheid government to photograph, document, and control the movements of the black population
- Data used for US police departments’ facial recognition software is predominantly faces of African American
- 2009 - UK Border Agency’s Human Provenance Pilot Project gains controversy for requesting saliva, nails, and hair samples from asylum seekers, especially East Africans, to vet asylum claims
- Comparison to Saartjie “Sara” Baartman, an African woman who was paraded around in freak shows in early 19th century Europe
  - After her death, she was dissected and put on display until 1974
Section 4: Technological Benevolence
Technology Is Not Always a Fix

- In a move towards humane alternatives to incarceration, tech companies have been developing more and more sophisticated electronic monitoring technologies
  - There are really just innovative forms of injustice
  - Algorithms decide who is a “better” candidate for EM, and who isn’t
- Human decision makers may be biased, but they have a diversity of biases
  - Relegating to a handful of algorithms that have built in prejudices would be worse
  - “Neutrality is no safeguard against discriminatory design”
Racial Fixes

- Racial fixes are “social technologies that create vertical realities” by providing freedom/happiness to one group and captivity/misery for another
  - They continuously try to push the idea that they’re benevolent via “feel-good” messaging
- Racial fixes are appealing because they give the impression of tailoring uniquely to you when in reality it’s tailoring to people “like you”
- “Any time we are presented with a binary decision – bland generalization or spicy stereotype - it is important to ask what options are left out of the frame”
- *Silicon Valley* parodies these technologies in one of its episodes
Detecting fixes

- Electronic monitoring creates vertical realities
- The spell of techno-benevolence
  - Revolution = marketing catch phrase
Section 5: Retooling Solidarity, Reimagining Justice
Abolition of the Prison Industrial Complex

● Abolition:
  ○ Comes from the Latin words for “destroy” and “grow”
  ○ Never about bringing harmful systems to an end but also about envisioning new ones

● Appolition: an app that converts your daily change into bail money to free black people

● Promise: a decarceration start-up promoted and invested in by Jay-Z
Selling Empathy

- VR as an empathy machine - moving through someone else’s world
- Criminal justice reform with VR?
- Awareness raising experiences
  - Zuckerberg visiting Puerto Rico after Hurricane Maria
- Can VR be really considered empathetic?
  - NGOs, UN, and UNICEF using VR for human rights campaigns
- Using VR for prison reform - gain job and life skills prior to release
Rethinking Design Thinking

Design thinking:
1. Empathize
2. Define
3. Ideate
4. Prototype
5. Test

#DesignSoWhite

“It is not simply that design thinking wrongly claims newness, but in doing so it erases the insights and agency of those who are discounted because they are not designers, capitalizing on the demand for novelty across numerous fields of action and coaxing everyone who dons the cloak of design into being seen and heard through the dominant aesthetic of innovation.”
Beyond Code-Switching
Reimagining Technology

“To see things as they really are, you must imagine them for what they might be.”

- Derrick Bell