

REENVISION DATA SCIENCE

- Explore different ways people (and you!) are using data science to support marginalized groups
- Practice explaining the harms of how AI exacerbates racism to non-AI experts

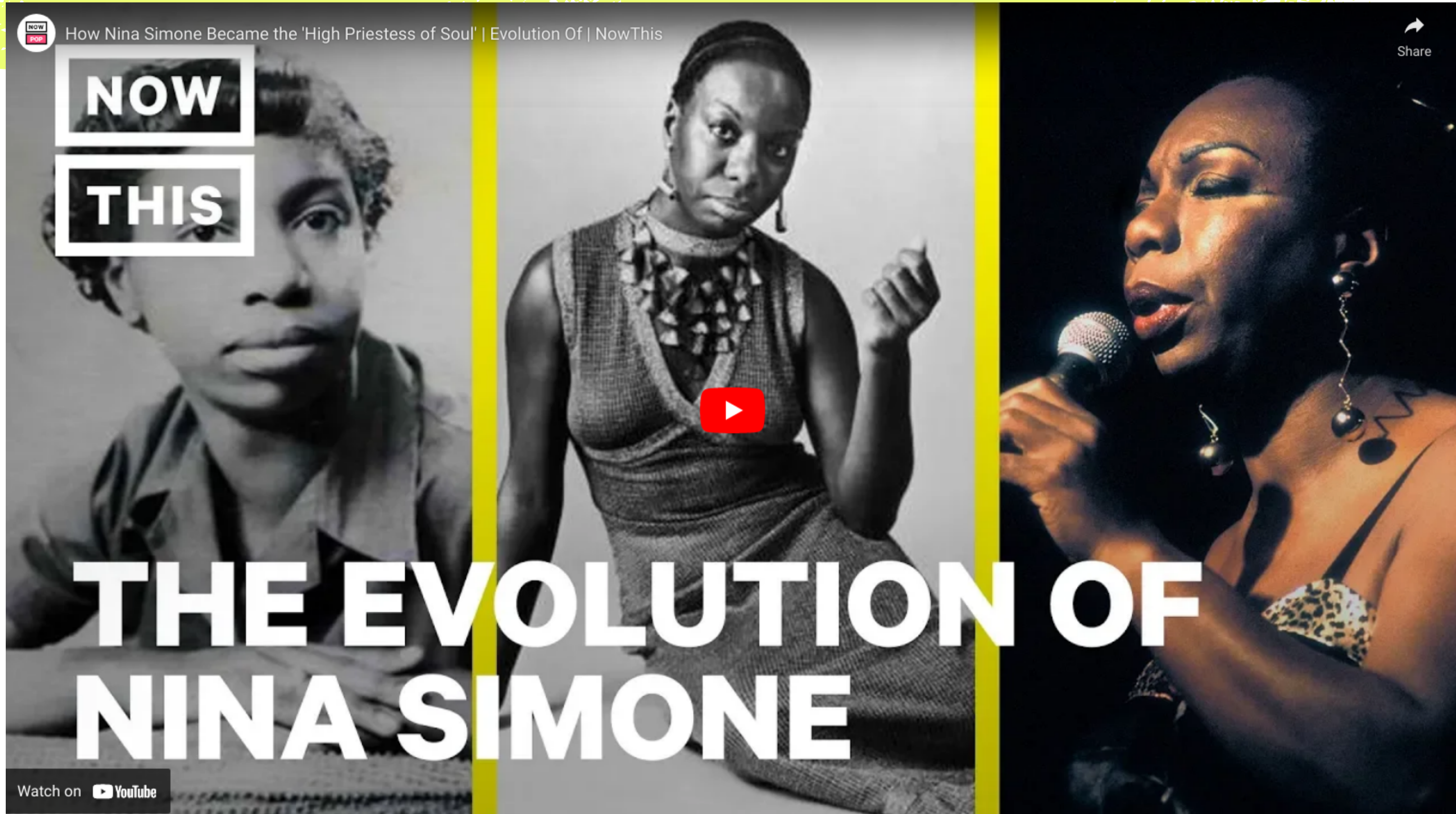
DRAW YOUR ANSWER TO THIS QUESTION:

- **HOW DO YOU REENVISION DATA SCIENCE BEING USED TO SUPPORT MARGINALIZED COMMUNITIES?**
 - **WRITE 3 SENTENCES ABOUT HOW YOU WOULD ANSWER THIS QUESTION**
 - **WHAT'S THE PROBLEM YOU'RE TRYING TO SOLVE?**

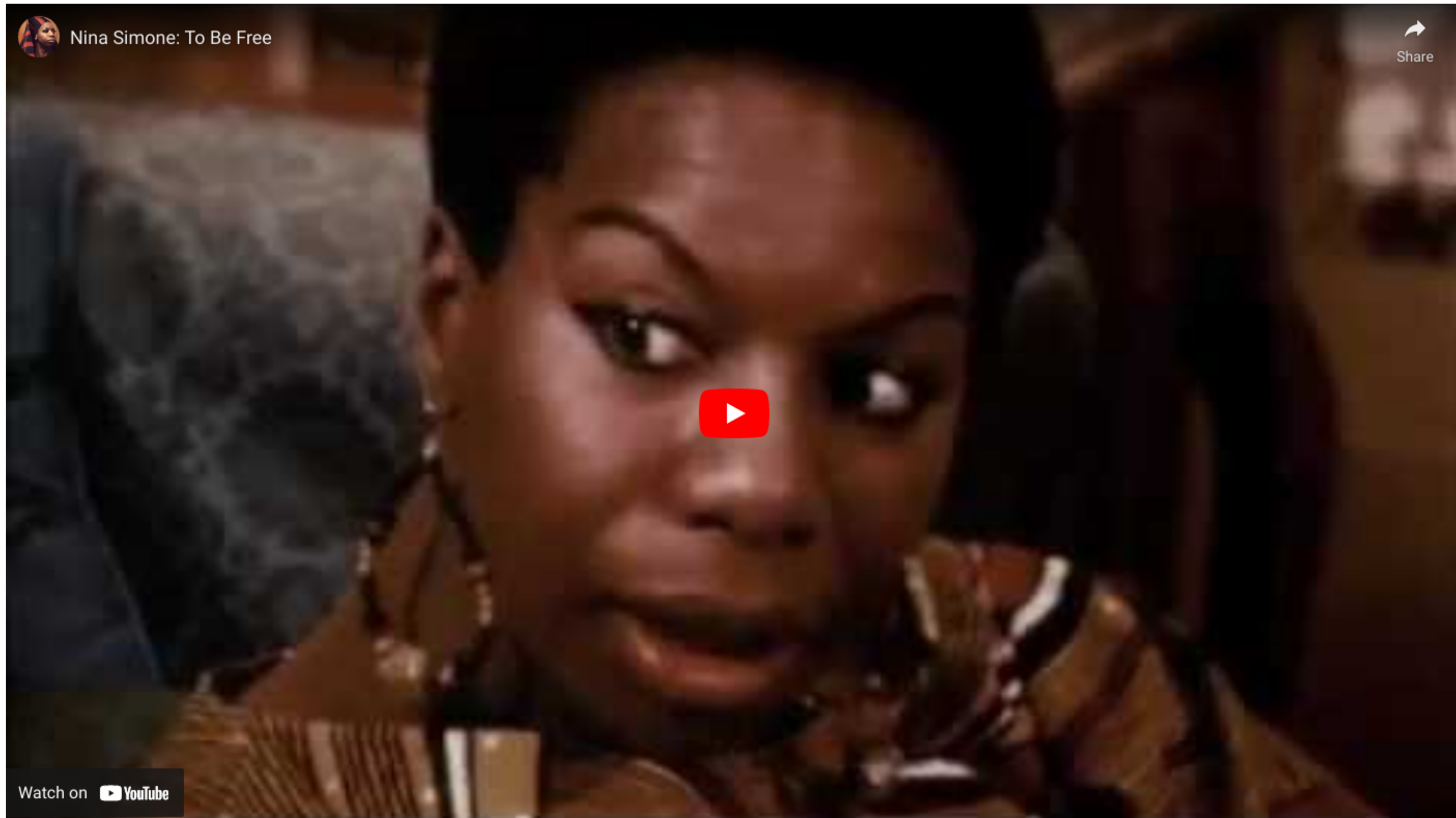
REENVISION DATA SCIENCE

1. In this activity, we will combine musical inspiration and the creative process. While listening to one of Nina Simone's songs we will create a design for printing that's influenced by her music.
2. Together we will learn the basics of designing, carving, and printing your rubber carving blocks onto fabric.

REENVISION DATA SCIENCE



FREEDOM



REENVISION DATA SCIENCE

- 1. HOW WAS NINA SIMONE'S LIFE AFFECTED BY JIM CROW LAWS WHEN SHE WAS YOUNG AND OLDER?**
- 2. HOW DID NINA SIMONE USE HER MUSIC AS A FORM OF ACTIVISM? CAN YOU THINK OF A SPECIFIC EXAMPLE?**
- 3. HOW DID HER ACTIVISM ENCOURAGE THE CIVIL RIGHTS MOVEMENT?**

NINA SIMONE - I WISH I KNEW HOW IT WOULD FEEL TO BE FREE-



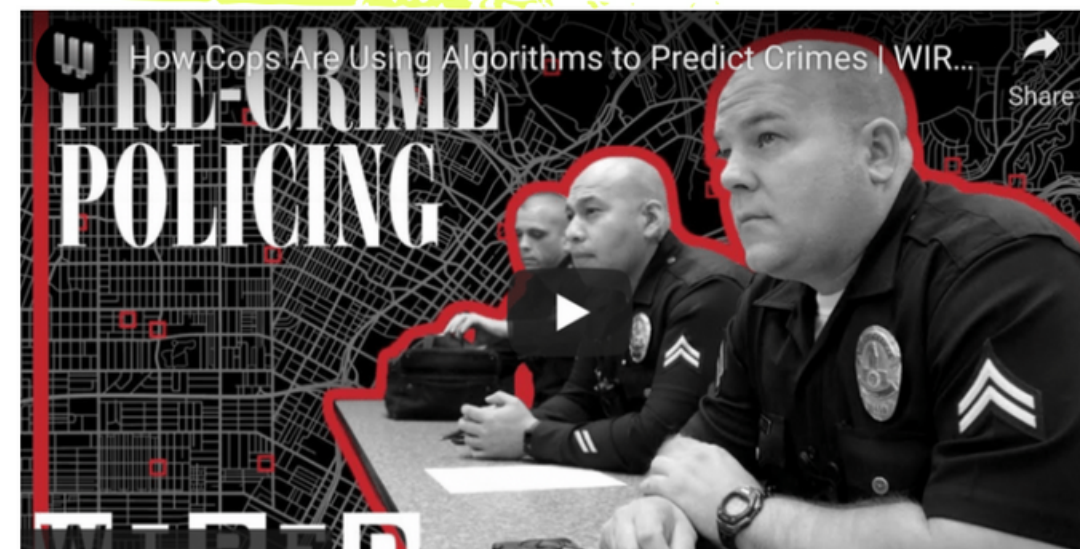
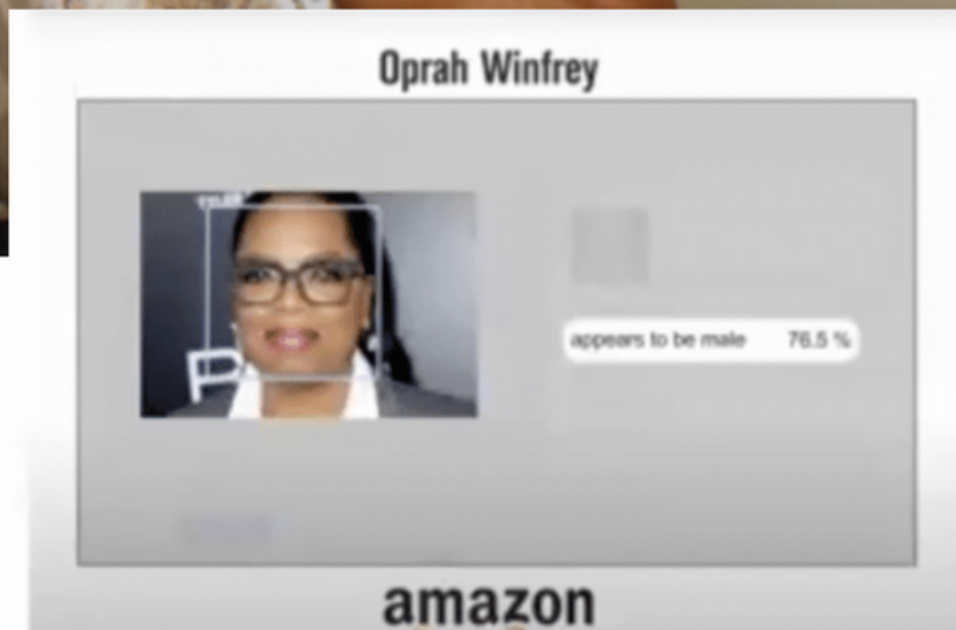
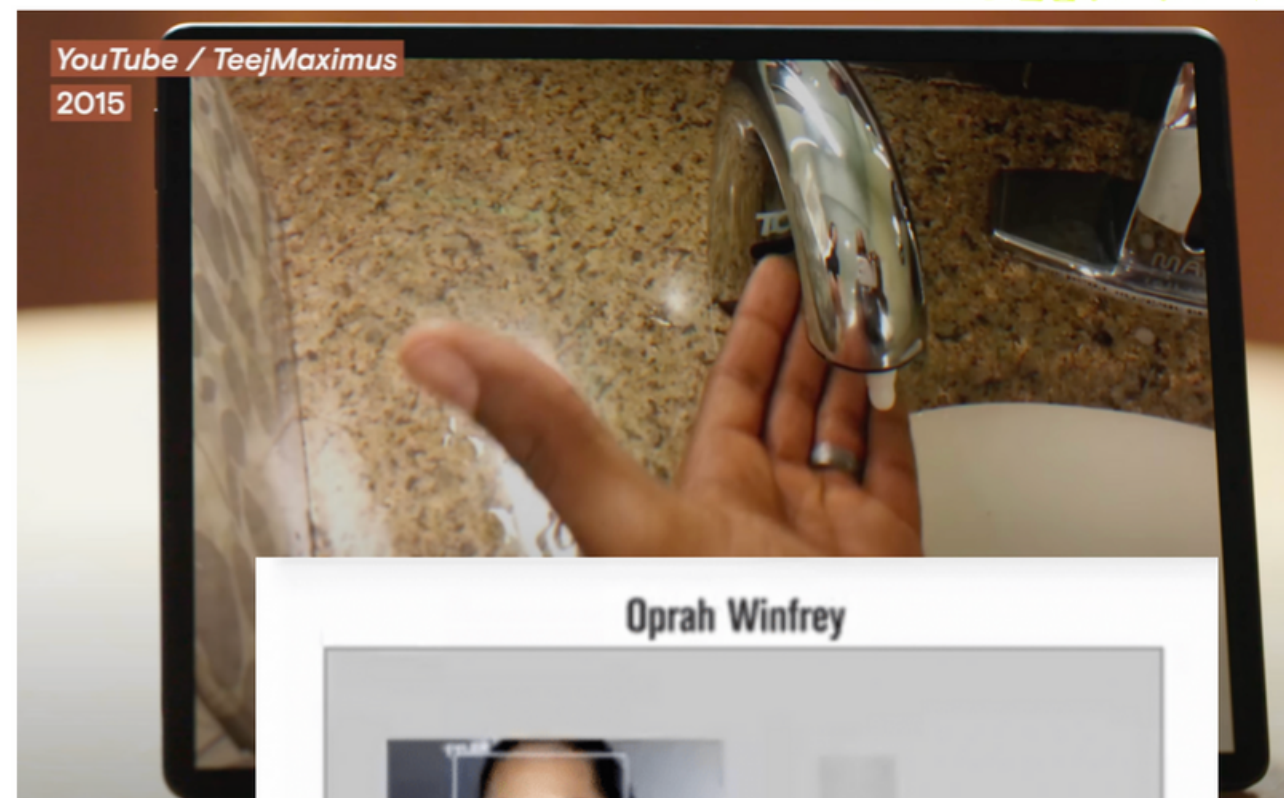
**IN ORDER FOR US TO REENVISION
HOW DATA SCIENCE IS UTILIZED TO
SUPPORT MARGINALIZED GROUPS,
WE NEED TO THINK ABOUT WHAT IT
WOULD MEAN TO BE FREE**

NINA SIMONE - I WISH I KNEW HOW IT WOULD FEEL TO BE FREE-

- Did this song inspire you? If so, how did it inspire you?
- Nina describes freedom as being fearless. What does it mean to be free? When was the last time you felt free? Can you describe a specific example?
- In what ways in your life are you not free or felt controlled? Have you ever felt discriminated against?
- How does data science affect you or someone from your community negatively?
- How does Nina's music inspire you to reenvision how data science can support marginalized groups?

EXAMPLES OF HOW DATA SCIENCE IS NOT MAKING PEOPLE FEEL FREE

Is AI amplifying racism?



EXAMPLES OF HOW DATA SCIENCE IS NOT MAKING PEOPLE FEEL FREE

HOW DOES TECHNOLOGY SUPPORT SOME STUDENTS AND NOT OTHERS?

technology in schools?



technology in schools? ■



Google

"three black teenagers"

Google Search

I'm Feeling Lucky



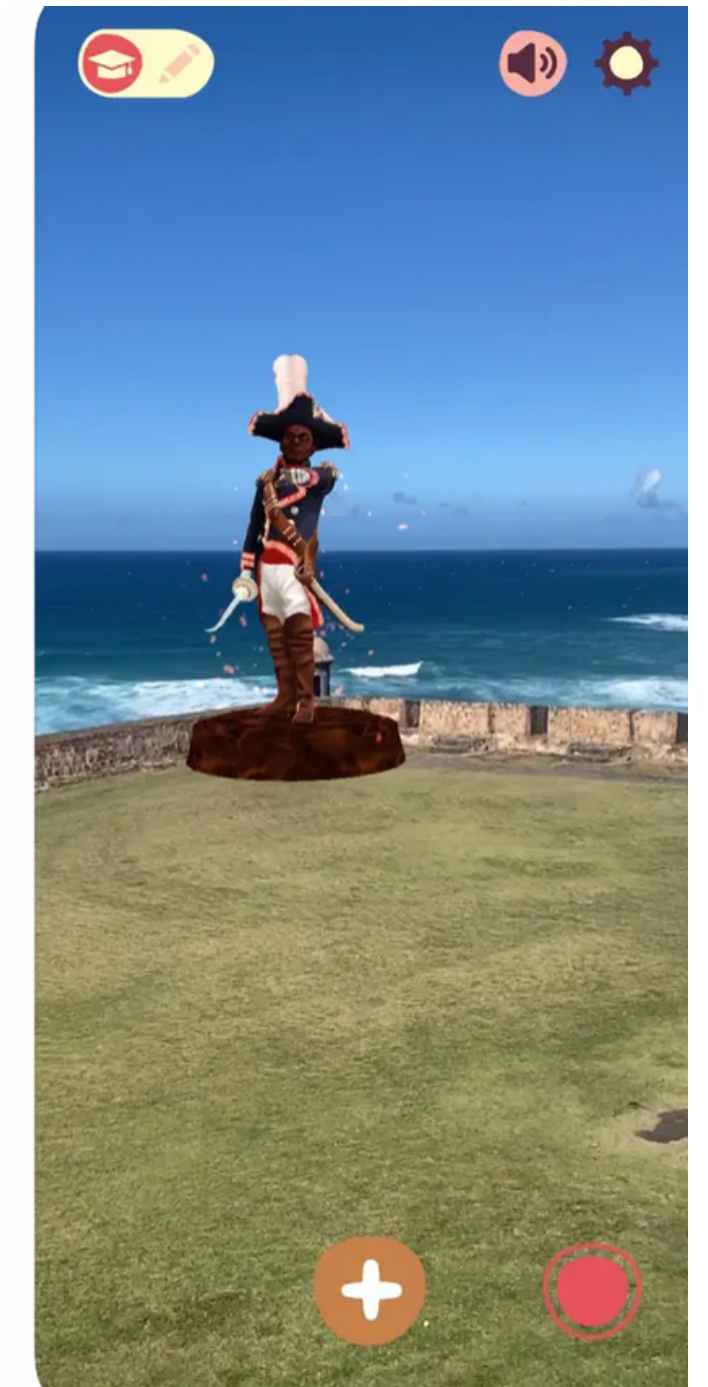
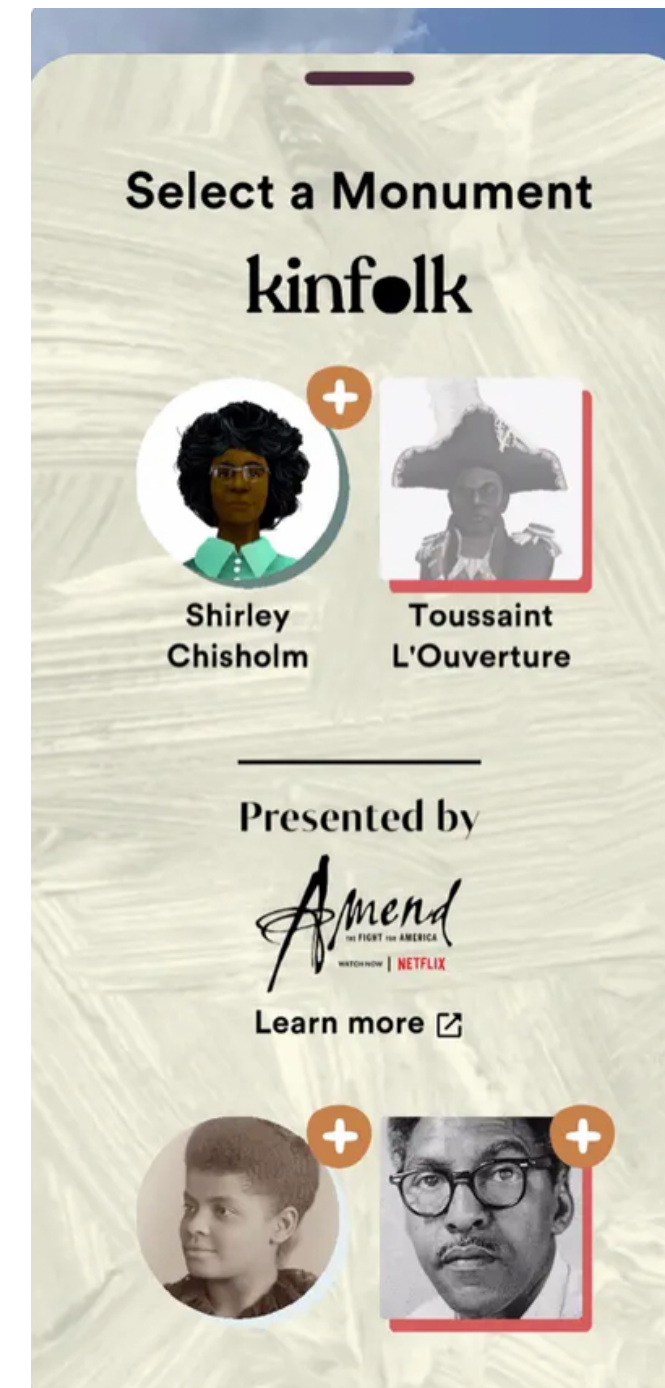
"algorithmic discrimination"

EXAMPLES OF HOW DATA SCIENCE IS NOT MAKING PEOPLE FEEL FREE

- facial recognition not recognizing darker-skinned faces
- predictive policing contributing to mass incarceration
- discrimination in online ad delivery
- recommendation systems that don't recommend resumes with "Black names"
- mass surveillance

KINFOLK

- this app basically asserts that there are so many missing monuments of the Black radical activists from history. As you look through the camera, and the app will erect a monument of a figure like Toussaint Louverture, or Frederick Douglass, and explain the things they did



DATA ACTIVISM

Challenge power



DATA ACTIVISM

use art and computing to empathize with people who are oppressed



BLACK MEMES MATTER: #LIVINGWHILEBLACK WITH BECKY AND KAREN

- memes are used as a way to critique white supremacy and the culture of white surveillance and how ultimately things we do not consider to be traditional data points can be used as resources and building communities



Image 6. Colin Kaepernick is Unmoved.



Image 7. Rosa Parks is Unbothered.

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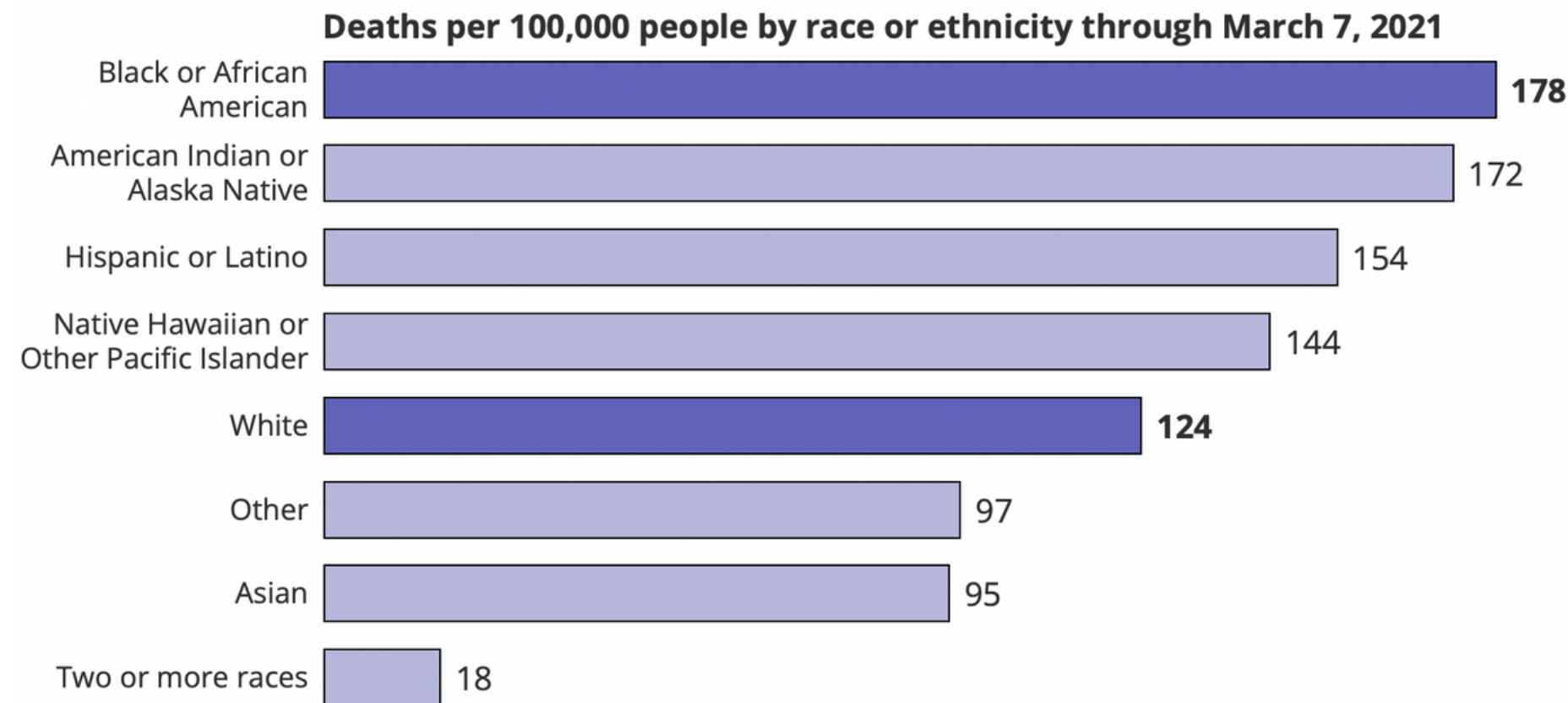
Image 7. Rosa Parks is Unbothered.

CHALLENGING RACISM IN THE USE OF HEALTH DATA

- using data science
to examine how the
healthcare system is
biased

EXPERTS EXAMINE HOW DATA SCIENCE CAN PROMOTE RACIAL EQUITY

Nationwide, Black people have died at 1.4 times the rate of white people.



[Notes ↓](#)

We've lost at least 73,462 Black lives to COVID-19 to date. Black people account for 15% of COVID-19 deaths where race is known.

CONDUCTING RESEARCH THROUGH AN ANTI-RACISM LENS

- **collect data that is not as biased and examine the data that we have in a holistic way, taking into account the historical factors.**

DATA ACTIVISM FINAL PROJECT: BLOCK PRINTING

- Block printing is when an ink pad is applied to a carved material and then pressed onto paper or fabric.



DATA ACTIVISM FINAL PROJECT: BLOCK PRINTING

I drew inspiration from the "Al Ain't I A Woman" video and the "Urgency of Intersectionality" video to show how I want to create AI that describes African American women as beautiful, joyful, and free



DATA ACTIVISM FINAL PROJECT: BLOCK PRINTING

1. Materials kit includes:
 - a.(1) Rubber carving blocks
 - b.(1) carving tool
 - c.(1) white shirt
 - d.Plain paper
 - e.Tracing paper
 - f.Ink pad
 - g.Pencil
 - h.markers



DATA ACTIVISM FINAL PROJECT: BLOCK PRINTING

- 1) draw your design onto the tracing paper
- 2) trace your design onto the transfer paper
- 3) transfer your the design from the sketch paper onto the carving block
- 4) use the carving tool to carve your image
- 5) put the stamp pad on top of the block



HOW TO CARVE A BLOCK



DATA ACTIVISM FINAL PROJECT: BLOCK PRINTING

6)transfer your block onto your shirt



DATA ACTIVISM FINAL PROJECT: BLOCK PRINTING

7) Share your design with someone that is not a data science expert. Continue to inform people about the importance creating AI algorithms that support marginalized groups. We hope you enjoyed this assignment.

