Activity 7:

Reenvisioning Data Science

Lesson (1 hour and 30 minutes)

Activism + Liberatory Computing

Objectives
- Students will explore different ways people are using data activism to support marginalized groups
- Practice explaining the harms of how AI exacerbates racism to non-AI experts
- Explore artistic expression as a form of political activism

Essential Questions

- Why is it important for individuals to develop a positive, healthy image of themselves?
- How can data science assist people?
- How can individuals learn to talk about injustice in AI?
- How did Nina Simone use her songs as a form of political protest to shape the objectives of the civil rights movement?

Resources
- [Link to the slides about this activity.](#)
- The file name for the slides is titled, "Reenvision_Data_Science_slides.pdf". The slides can be utilized to assist students with following along with the instructor.

Preparation

Material	Description
Block printing Video	"DIY Stamp Making, Block printing, Lino Cutting. I'm going show you how to make stamps from this rubber carving block. I tried different ink to see what's best. This is kinda just my take on printmaking "(Shmoxd)
Materials needed to start block printing:	(1) rubber carving block (1) carving tool set (1) white shirt - plain paper - Tracing paper - Ink pad - Pencil - markers
How Nina Simone Became the 'High Priestess of Soul' | Evolution Of | NowThis	"Not only was Nina Simone one of the greatest contributors to Black history through her music, she was also as champion for the civil rights movement." (NowThis Entertainment)
Nina Simone: To Be Free	"Recording session: Documentary, excerpt from "Nina: An Historical Perspective" by Peter Rodis" (Nina Simone YouTube)
NINA SIMONE - I wish i knew how it would feel to be free-LYRICS	This video plays one of Nina Simone's songs titled, "I wish I knew how it would feel to be free".
Slides	The file names for the slides are titled, "Reeinvision_Data_Science_slides.pdf"

Instructions

Activity 1:Nina Simone and AI for Justice**[45 minutes]**

Instructions	
Review slides about Nina Simone [35 minutes minutes]	- Slides 1-3 give a brief overview of the lesson - Slides 4-9 consists of videos about Nina Simone. - Have students watch: "How Nina Simone Became the High Priestess of Soul" (10 minutes): - While students are watching the video, have them answer the following questions: - How was Nina Simone's life affected by Jim Crow Laws when she was young and older? - How did Nina Simone use her music as a form of activism? Can you think of a specific example? - How did her activism encourage the civil rights movement? - Watch Nina Simone describing what it means to be free: 1:13-til the end (2 minutes) - Listen to: "https://www.youtube.com/watch?v=CoU4YCNt3OM" (10 minutes) - While students are watching the video, have them answer the following questions by themselves then as a class: - How do you think African Americans felt during that time because of Jim Crow laws? - Why does Nina Simone not feel free? - Based on the song title, "I wish I knew how it would feel to be free", what type of music choices did she make in order to show how she felt about the civil rights movement? - 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 not felt free?
	■ Have you ever felt discriminated against?
	● Slides 10-12 consists of examples of how data science is not making people feel free.
	● Discuss how AI has harmed African Americans. List out the different ways AI has harmed African Americans on the white board. Possible answers: facial recognition not recognizing darker-skinned faces(5 minutes)
	○ predictive policing contributing to mass incarceration
	○ discrimination in online ad delivery
	○ recommendation systems that don't recommend resumes with "Black names"
	○ mass surveillance
How people use data activism to support minoritized groups[10 minutes]	● Slides 13- 21 consists of different examples of people using data science to mitigate systemic oppression. Here are a few examples about how people are using data science to mitigate systemic oppression.
	● Here is the link to a document that contains the description slides 13-21

Activity 2: Block printing **[45 minutes]**
Instructions
Review Slides about Block Printing [5 minutes]	Slides 21-28 consists of the instructions for block printing. Students will create a block print that answers the following question "How do you envision data science being used to support marginalized groups?" Here are a few pointers:
	● If you don't have tracing paper, you can use white printer paper to transfer your design onto the block.

	● Slide 26 contains a video tutorial about block printing. Watch video about block printing: https://www.youtube.com/watch?v=mGwvJCZoCPU&t=252s
Reflection [40 minutes]	Reflection: Encourage students to share their experience doing the activity: ● What did you learn from this activity? ● What was challenging?