Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

A LETTER FROM OUR CODED BIAS CURRICULUM WRITER

Dear Teachers and Families,
Thank you for choosing to have your students and family members participate in the Milwaukee Film educational screening of *Coded Bias*. You will find that this documentary is extremely informative and timely. This film sheds light on how machine-learning algorithms can perpetuate society's existing race and gender-based inequities. *Coded Bias* is more than the exploration of the current state of the tech world, it is also a call to action. We are urged to consider what it means when artificial intelligence (AI) increasingly governs our human rights, what the consequences are for the people AI is biased against and how we can be the solution.

Coded Bias is especially timely as more and more people are engaging with artificial intelligence technologies on a day to day basis. This curriculum will encourage students to evaluate their past experiences with AI and the role it plays in their life. Through this curriculum, we hope students will not only be made aware of the challenges in the world of AI but also the possibilities of the positive impact artificial intelligence can have on the world.

While there are certainly many areas in the field of technology that continue to pose challenges and barriers for marginalized communities it is important to keep in mind that this is the very reason why there is a critical need for more representation in this industry. The goal of this curriculum is to inform students of what is and inspire them to imagine what can be.

We begin the curriculum with a glimpse into the past. The fight for proper education, housing and employment and political freedoms for Black and Brown people continues even today. Students will be made aware of how advancements in the field of technology have played a role in upholding inequities in these spaces. Importantly, by the end of the curriculum, students will be encouraged to actively use their voice to drive awareness of biases in tech and to share their dreams of a world where tech benefits everyone.

MEET THE CURRICULUM WRITER - NADIYAH JOHNSON

< />

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

CODED BIAS - CURRICULUM AT A GLANCE

The Fight for Civil Rights

Students will assess how the civil rights movement has evolved over time. They will be made aware of how technology has played a role in perpetuating disparities in the fight for fair housing, employment, voting etc. Students will understand how the civil rights movement has evolved in the digital age. They will be prompted to critically analyze how technology impacts education, housing and employment. Students will also learn methods to hold big tech accountable and advocate for change.
Students will also learn about facial recognition and how it has begun to threaten human rights.

CCSS.ELA-LITERACY.RST.9-10.2Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.
C1.a.10.h (+) Develop criteria to evaluate the beneficial and harmful effects of computing innovations on people and society.
IC2.a.3.h(+) Evaluate the impact of equity, access, and influence on the distribution of computing resources in a global society.
IC3.b.5.h Research and understand misuses of private digital information in our society.

The Fundamentals : AI / Machine Learning

Students will familiarize themselves with the fundamentals of artificial intelligence and machine learning. Students will be able to explain what an algorithm is. Students will be introduced to the concept of bias and how it creeps into computer programs.

IC1.a.10.h (+) Develop criteria to evaluate the beneficial and harmful effects of computing innovations on people and society.
IC2.a.3.h(+) Evaluate the impact of equity, access, and influence on the distribution of computing resources in a global society.
IC3.b.5.h Research and understand misuses of private digital information in our society.

Coded Bias + Weapons of Math Destruction

Students will learn the importance of data transparency. Students will assess the effects of AI on democracy and think critically about how AI has begun to govern our lives. Students will also learn possible ways to regulate algorithms and conduct research on the fairness of leveraging algorithms in the justice systems.

CCSS.ELA-LITERACY.RST.9-10.8 Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem. DA4.b.2.h (+) Identify mathematical and computational patterns through modeling and simulation.
IC1.a.6.h Debate the social and economic implications associated with ethical and unethical computing practices (e.g., intellectual property rights, hacktivism, software piracy, new computers shipped with malware).

Joy Buolamwini + Poetry

Students are challenged to be vocal about what they've learned and the changes that they hope to see in the world.

CCSS.ELA-LITERACY.W.9-10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
CCSS.ELA-LITERACY.W.9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
IC1.a.9.h Describe how computation shares features with art and music by translating human intention into an artifact.

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

THE FIGHT FOR CIVIL RIGHTS CONTINUES

The civil rights movement In the 1950's - 1960's was an uprising of Black people and people of color against widespread racism, segregation, discrimination, disenfranchisement and racially motivated violence. This movement has evolved over the years to address civil rights in the era of Big Data. The fight for equality in education, housing, and employment persists as algorithms play a role in amplifying disparities. Before watching the film, let's explore how issues of the past are still relevant in today's data driven society.

CIVIL RIGHTS

Learning outcomes:

- Understand the civil rights movement and how it's evolved in the digital age.
- Consider how technology impacts Education, Housing, employment.
- Understand how to hold Big Tech accountable and advocate for change.

Education

Read:

In 1954 the Supreme Court, in Brown v. Board of Education, ruled that schools could no longer be segregated and that state laws establishing separate public schools for black and white students were unconstitutional. The goal was to ensure that African Americans gained an equal level of education by desegregating public schools. Education, among other services and resources in public facilities, were not equal. Today, communities of color are still fighting for their children to obtain an education equal to their white peers regardless of where they live or how much money their families make.

https://www.pewresearch.org/fact-tank/2020/03/16/as-schools-close-due-to-the-coronavirus-some-u-s-students-face-a-digital-homework-gap/

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

POLITICS/HOUSING/EMPLOYMENT/CREDIT

Read:

Discrimination Through Optimization - How Facebook's Ad Delivery Can Lead to Skewed Outcomes

It's been discovered that the budget and content associated to an ad on Facebook can critically skew delivery along gender and racial lines which has created huge issues around the distribution of employment and housing opportunities.
Read the article below to learn how algorithms can accelerate discrimination through ad optimization.

FACEBOOK'S AD TOOLS SUBSIDIZE PARTISANSHIP, RESEARCH SHOWS. AND CAMPAIGNS MAY NOT EVEN KNOW IT.

https://www.washingtonpost.com/technology/2019/12/10/facebooks-ad-delivery-system-drives-partisanship-even-if-campaigns-dont-want-it-new-research-shows/

SUMMARY OF SETTLEMENTS BETWEEN CIVIL RIGHTS ADVOCATES AND FACEBOOK

https://nationalfairhousing.org/wp-content/uploads/2019/03/3.18.2019-Joint-Statement-FINAL-1.pdf

Optional
Dig Deeper: https://arxiv.org/pdf/1904.02095.pdf

Checking your understanding?

- What is the homework gap?
- What percentage of lower income teens don't have access to a computer?
- What is the problem with using online political advertising vs traditional advertising of the past (newspaper/TV)?
- Have Big Tech (Google, Twitter, Facebook, etc.) started to address skewed advertising?
- List 3 changes Facebook made as a settlement with civil rights advocates regarding housing , credit, and employment.

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

FACIAL RECOGNITION AND HUMAN RIGHTS

What is facial recognition technology?

Facial recognition software is increasingly used for everything from silly apps like TikTok and Instagram filters to airline security. Finger prints used to be a primary tool for identification, now face prints are taking the lead. If you've ever unlocked your phone using your face or let Facebook automatically tag you...you are leveraging facial recognition technology. Like any technology, it's important to consider how facial recognition technology affects our safety, privacy, ability to peacefully protest—or even enjoy a day in the city without being identified. As facial recognition technology is becoming more and more prevalent in today's world, we have to begin to consider the impact it has on society.

China's use of Facial Recognition Technology

China is the world's leader in the use of facial recognition technology. A database leak gave the world a glimpse into how pervasive China's surveillance really is. China's facial recognition system logs nearly 6 million records a day. In China no one is safe from facial recognition. With a vast network of cameras around the continent children and adults are surveilled in parks, hotels, tourist spots and more. This is an example of how technology that was initially meant to be beneficial can easily evolve into something that threatens human rights.

Watch

Checking your understanding?

- How are face prints created?
- Why is there a good chance our faces are recorded every day?
  - What could happen as a result?
- What are the ways law enforcement and airport security are using facial recognition?
- How is facial recognition technology being used in China?
- Where would you draw the line when it comes to facial recognition? Private companies (like Snapchat or Walmart)? Everyone? No one? Explain your answer using evidence from the videos.

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

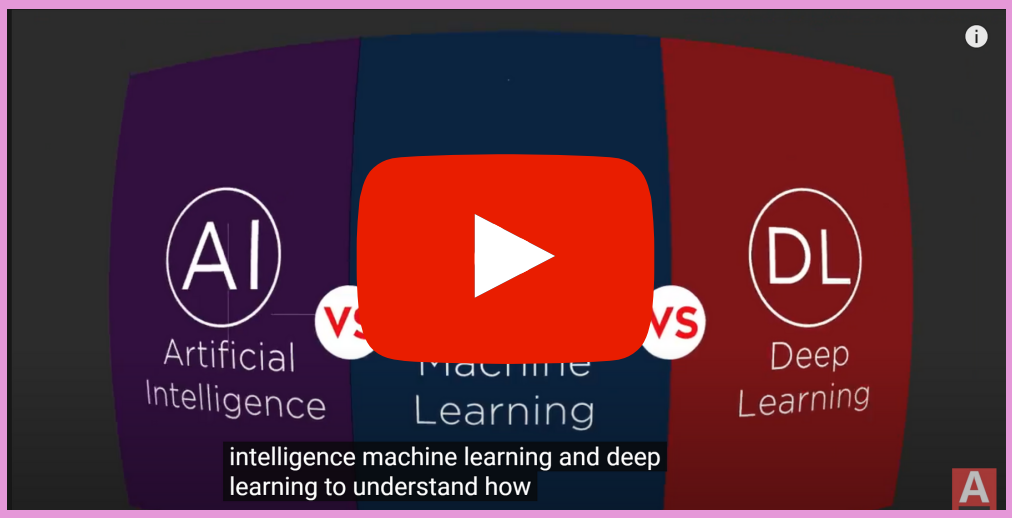
EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

THE FUNDAMENTALS

In this curriculum, we are going to learn how artificial intelligence is impacting our world and how the fight for civil rights has evolved to address algorithmic biases. Before we dive in let's cover the basics. Watch the video below to learn the difference between AI and Machine Learning.

AI VS MACHINE LEARNING



Checking your understanding?

- What is Machine Learning?
- How would you explain AI?
- What are some initial questions you have about Machine learning and AI?

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

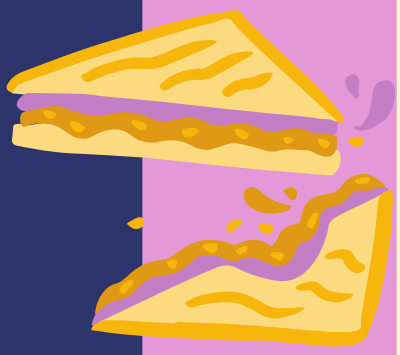
EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

An algorithm is a sequence of steps or instructions. Though computers run algorithms constantly, humans can also solve problems with algorithms.

Write

Write a basic algorithm to make a peanut butter jelly sandwich.



Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

ALGORITHMS

While a human can understand your algorithm fairly well. A computer would have a hard time understanding because they require very detailed instructions using variables, logic and if/else statements in a language it understands.

In this scenario AI would allow for the computer to simulate human behavior such as distinguishing between knife and fork or grape jelly and strawberry jelly by leveraging data instead of specific instructions. The data we feed into computers can be used to help the computer see and understand the world through our lens.

Artificial Intelligence: Enabling a computer to simulate human behavior through algorithms.

Machine learning: An extension of AI that enables computers to function like humans by leveraging experience from data input.

COOL EXAMPLES OF AI

- Facial recognition
- Self driving cars
- Chat bots
- Recommendations (Netflix, Amazon)

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

AI IS COOL AND WE NEED YOU TO HELP IT MAKE THE WORLD BETTER!

Artificial Intelligence is an amazing technology that can make significant positive impacts in today's world. AI is being leveraged in healthcare to help doctors diagnose patients. It is accelerating productivity in the agriculture industry. Artificial intelligence is currently being used to create smart and sustainable cities. These are just a few examples of how AI is changing the world for the better.

We need you!
The tech industry is not as diverse as the population it serves. As data is now an economic driver and being leveraged in almost every industry it is important that there is a wide representation of people to ensure that AI benefits everyone instead of a small portion of the population.

WHY YOUR PRESENCE MATTERS!

- Your perspective is needed. More perspectives in the room as technology and AI products are developed guarantees that more people will benefit.
- You bring innovation and creativity. Statistics show that more diverse teams encourage innovative ideas and increase productivity.
- If the lack of representation in the field of AI and technology persists, the increase in AI and automation in the world can accelerate racial wealth and achievement gaps. Your presence in the field of technology can prevent this.

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

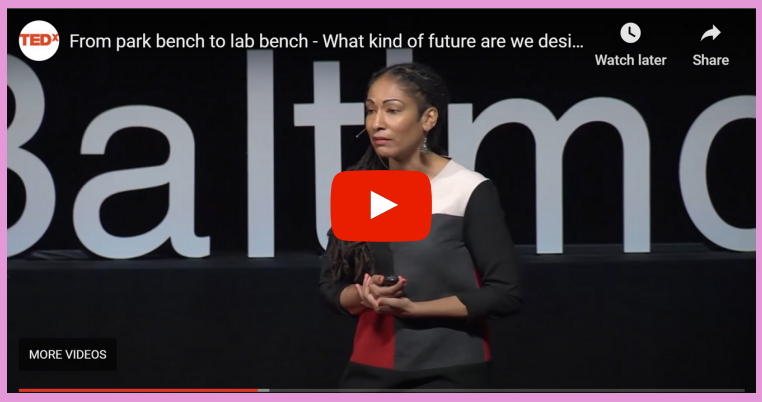
CODED BIAS

TWO REMARKABLE BLACK WOMEN IN AI

Below are pioneer women who are paving the way to create responsible and ethical AI that promotes fairness and inclusiveness in society.

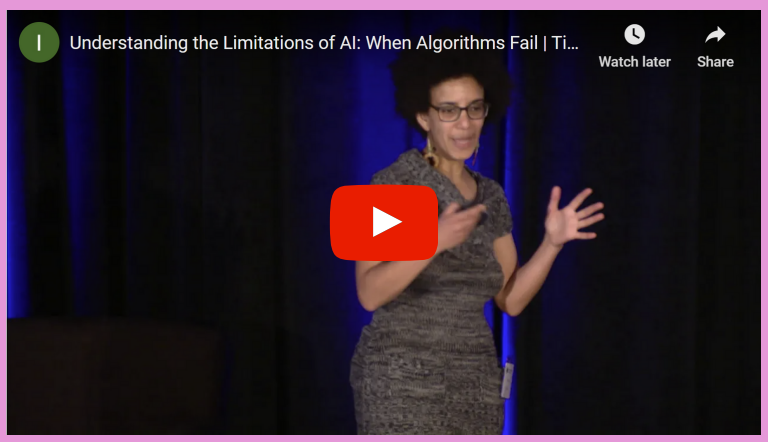
RUHA BENJAMIN

Professor Ruha Benjamin is an Associate Professor of African American Studies at Princeton University, where she studies the social dimensions of science, technology, and medicine. She is also the founder of the JUST DATA Lab and the author of two books, People's Science (Stanford) and Race After Technology (Polity) in which she talks about how algorithm can encore racial discrimination.



Timnit Gebru

Timnit Gebru received her PhD from the Stanford Artificial Intelligence Laboratory, studying computer vision under Fei-Fei Li. She's currently a research scientist at Google in the ethical AI team. Prior to that she did a postdoc at Microsoft Research, New York City in the FATE (Fairness Transparency Accountability and Ethics in AI) group, where she studied algorithmic bias and the ethical implications underlying any data mining project.



Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

SHARE YOUR IDEAS

Given what you've learned about the possibilities of tech and AI, share what technology *you* would like to see developed in the near future that would make a positive impact on the world. Tell us how this invention would leverage artificial intelligence.

STEAM & DREAM Lab

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

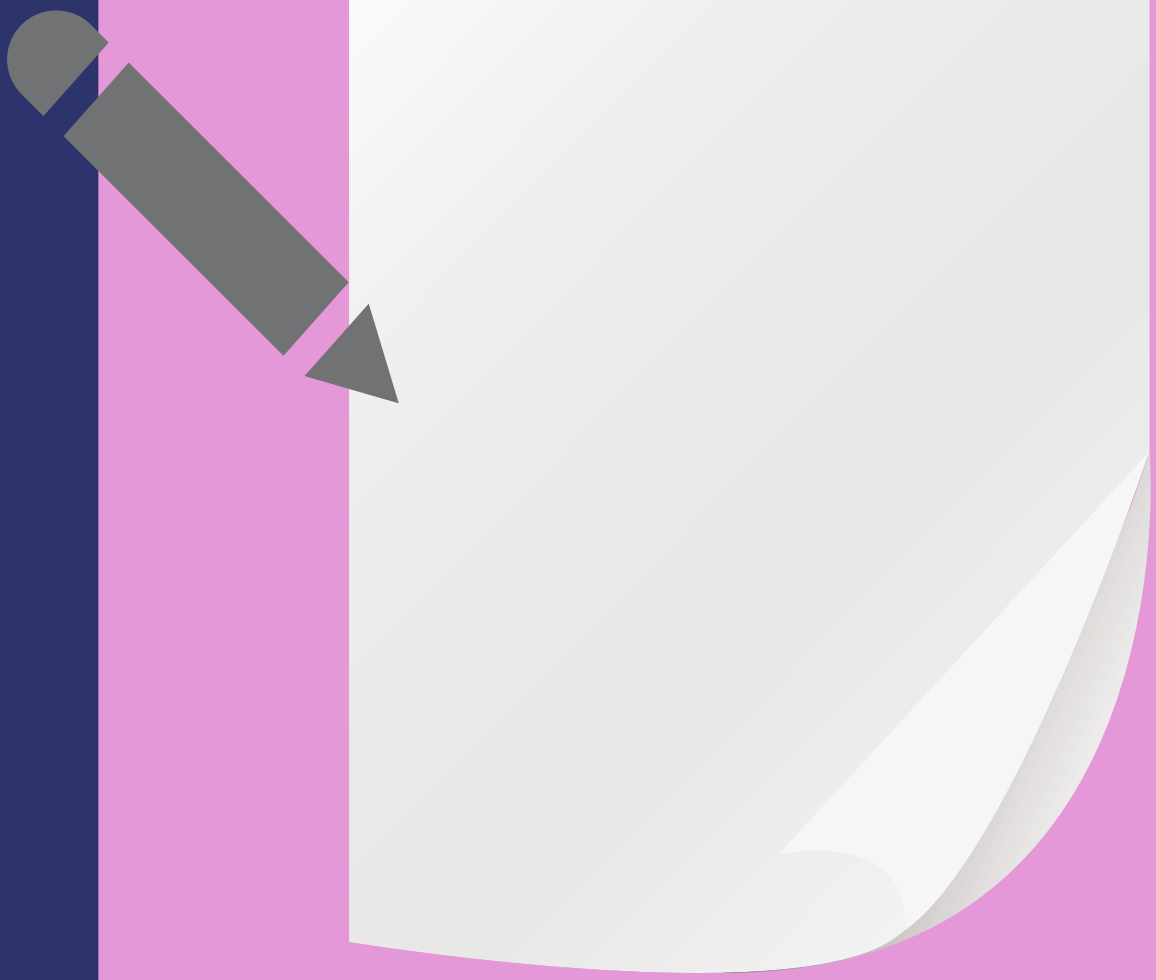
EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

IF THE SHOE FITS

Draw

Close your eyes and picture a shoe. Draw the first image of a shoe that pops in your head.



</>

Before watching

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

IF THE SHOE FITS: BIASES IN DATA SCIENCE

Why do you think that particular shoe popped into your head?

Your idea of a shoe may be very different from another person's idea of a shoe (you might imagine a sports shoe where as someone else might imagine a dressy shoe).

Now, let's imagine we had to describe a shoe with the same characteristics to a computer.

This is how our own experiences, perception of the world, and biases can slip into algorithms. A single version of a shoe is not a complete story of what a shoe can be.

- How can you ensure that the computer has a better and more complete understanding of what a shoe is?

Often times teams that build AI products such as facial recognition technology lack diverse perspectives which can be reflected in the output of the program. This is why it is important to have teams and data sets that represent the population the technology aims to serve.

What does this tell us about how we can hold big tech companies accountable?


< />

During the film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

CODED BIAS

When MIT researcher, poet, and computer scientist Joy Buolamwini uncovers racial and gender bias in AI systems sold by big tech companies, she embarks on a journey alongside pioneering women sounding the alarm about the dangers of unchecked artificial intelligence that impacts us all. Through Joy's transformation from scientist to steadfast advocate and the stories of everyday people experiencing technical harms, Coded Bias sheds light on the threats AI poses to civil rights and democracy.

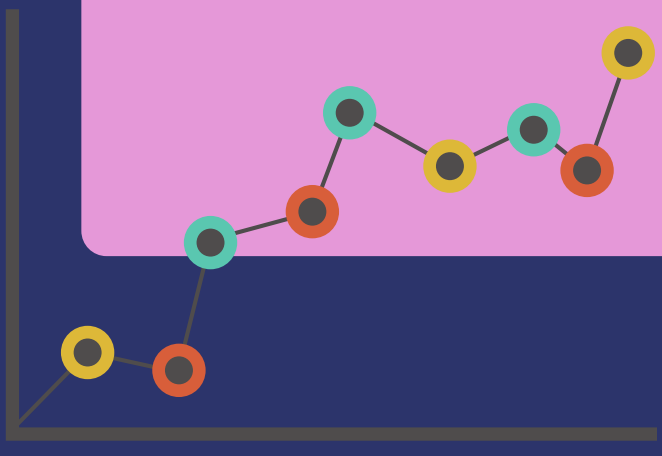
SUMMARY OF CODED BIAS

Learning outcomes:

- Students understand how government is impacting our day to day lives using AI
- Students should be able to outline primary present-day concerns of AI
- Students understand how AI effects human rights

Data is Destiny

Data is the fuel of the tech industry. Many investors incentivize tech companies to collect and sell the data of the general public. When data falls into the wrong hands, users' data can be exploited, causing adverse, violent, or chaotic outcomes. When data falls into the right hands it can be used to advocate for societal change that benefits all of humanity.



During the film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

WEAPONS OF MATH DESTRUCTION

In this curriculum, we are going to learn how artificial intelligence is impacting our world and how the fight for civil rights has evolved to address algorithmic biases. Before we dive in let's cover the basics. Watch the video below to learn the difference between AI and Machine Learning.

CATHY O'NEIL | WEAPONS OF MATH DESTRUCTION

Checking your understanding?

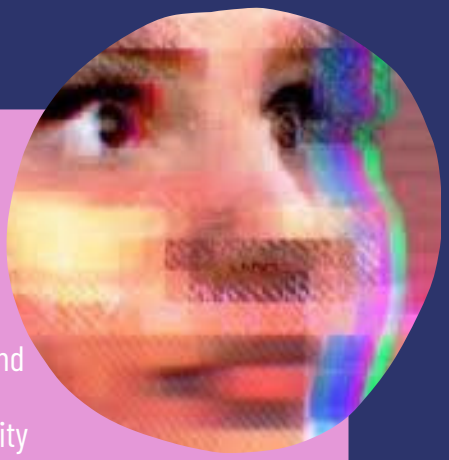
- How do you feel after watching Cathy O'Neils Ted Talk?
- Cathy says : "what's efficient for campaigns is inefficient for democracy."
  - Why is that? What point is she making?

During the film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS



PROS/ CONS OF AI

Read:

Code-Dependent: Pros and Cons of the Algorithm Age

"Algorithms are aimed at optimizing everything. They can save lives, make things easier and conquer chaos. Still, experts worry they can also put too much control in the hands of corporations and governments, perpetuate bias, create filter bubbles, cut choices, creativity and serendipity, and could result in greater unemployment"

https://www.pewresearch.org/internet/2017/02/08/code-dependent-pros-and-cons-of-the-algorithm-age/

Microsoft Tay

Tay was an artificial intelligence bot that was released by Microsoft Corporation via Twitter on March 23, 2016; This bot did not stay active for long due to its quick ability to cause a stir as a result of its inflammatory and offensive tweets through its Twitter account. Microsoft shut down the service just 16 hours after its launch.

Tay sparked important conversations.

How do we teach AI to use public data without incorporating the worst traits of humanity?

Data scientists have a saying: "Garbage in, garbage out." The problem with Tay is she was fed a lot of garbage data.
"When Tay launched she begin receiving data from Twitter trolls. Tay quickly started picking up on patterns within the Twitter data and emulating much of the data she was receiving. This is similar to how parrots repeat things they hear without being aware of what they're saying.

During the film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

Checking your understanding?

- What are the 5 concerns about AI outlined in the *Code-Dependent* article?
- There is a section in the reading called, "Algorithmic Transparency." What are the benefits of making algorithms transparent to general public?
- In the reading, we learn that credit scores are already a huge algorithmic problem. What initial thing does the author suggest needs to be made transparent to the public to begin to regulate the algorithms?

Reflection

"The past dwells within our algorithms." -Joy Buolamwini

What does this statement mean to you? What are some examples of how data governs our lives? What are the impacts of this? Write your reflection below:

During the film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

YOU CAN'T EXPERIMENT WITH PEOPLE'S RIGHTS

Police have started using facial recognition in the United Kingdom without oversight or legal framework. Picking up new technology and leveraging it to enforce the law can put citizens' rights at a significant risk.

Research shows that the criminal justice system is embedded with racial disparities at every stage. The system benefits the privileged and punishes people from marginalized communities. Stakeholders have turned to technology like AI, predictive analytics, and automation to address these issues...but unfortunately this technology is exacerbating these issues due to built in bias.

Read:

WITH AI AND CRIMINAL JUSTICE, THE DEVIL IS IN THE DATA

https://www.aclu.org/issues/privacy-technology/surveillance-technologies/ai-and-criminal-justice-devil-data

Watch:

During the film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

ETHICAL VS MATHEMATICAL

PLAY

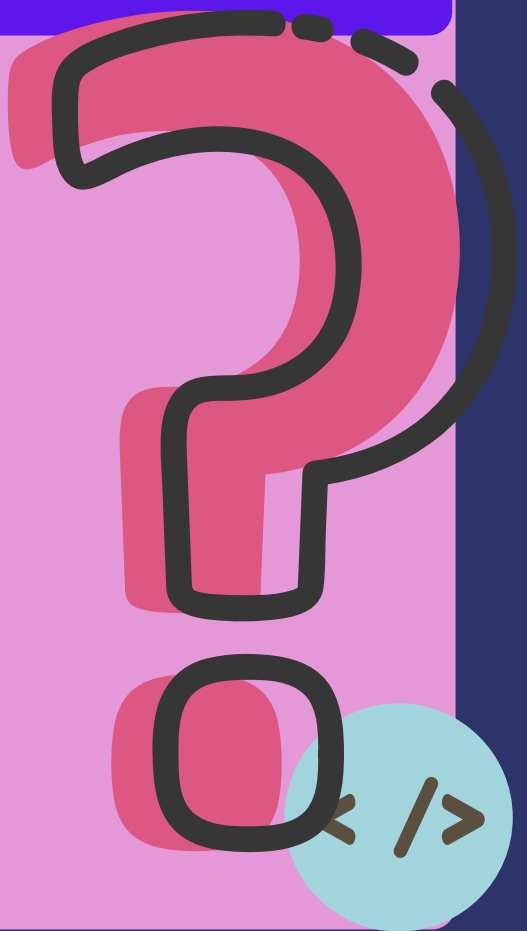
Deeper Dive:

- Can you make AI fairer than a judge? Algorithms for predicting if a person will recommit a crime are commonly used to determine if someone should be jailed or released. These predictions are used in pretrial, parole, and sentencing decisions. Below is a link to a game that simulates a risk assessment tool that uses a threshold to determine if people should be jailed or released. By moving the threshold you change the outcomes of who is jailed or released. The goal is to make the algorithm as accurate as possible, meaning people who are jailed are likely to recommit and people who aren't jailed are not likely to recommit a crime.

Read the article and play the game:
https://www.technologyreview.com/2019/10/17/75285/ai-fairer-than-judge-criminal-risk-assessment-algorithm/

QUESTIONS

- WHAT DID YOU LEARN?
- IS IT POSSIBLE FOR THE ALGORITHM TO BE FAIR?
- WHY?
- WHAT IS THE ALGORITHM ACCOUNTABILITY ACT?



After The Film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

JOY BUOLAMWINI

Joy gives an excellent talk on algorithmic biases and how they are shaping the world we live in. She touches on how quickly algorithms can spread around the world and how they begin to breach civil liberties. Watch her talk below.

HOW I'M FIGHTING BIAS IN ALGORITHMS | JOY BUOLAMWINI

Checking your understanding?

What does Joy say algorithmic biases can lead to?
Provide an example:
What are the ways Joy believes we can collectively fight bias in algorithms?

After The Film

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

JOY BUOLAMWINI

Poetry is a great way to communicate an important mission, vision, or passion. Watch the video below to hear Joy's poem on Algorithmic bias.

AI, AIN'T I A WOMAN? - JOY BUOLAMWINI

Write

Write a short poem that captures what you learned and how you feel about the impact of AI on the world.

Then, consider submitting your completed poem to our Poetry Contest for a chance to win your choice of an iPad mini or an Apple Watch! Go to the next page in this packet for instructions on how to enter.

BLACK LENS MILWAUKEE FILM
BLACK HISTORY MONTH
FOUR WEEKS OF FILM, CULTURE, AND CONVERSATION
PRESENTED BY MOLSON COORS

EDUCATION SCREENING PRESENTED BY
THE MILKY WAY TECH HUB
Herzfeld Foundation
NORTHWESTERN MUTUAL DATA SCIENCE INSTITUTE
Northwestern Mutual

CODED BIAS

POETRY CONTEST SUBMISSION FORM

Permissions are required for contest eligibility. Therefore, please complete the following instructions and submit your poem at the form at this link: https://bit.ly/39lg76g

The Milky Way Tech Hub, Milwaukee Film, Northwestern Mutual, and the Northwestern Mutual Data Science Institute urge you to enter our Coded Bias Poetry Contest to win your choice of an iPad mini or an Apple Watch!

Watch the film and dive into activities from this curriculum packet created by The Milky Way Tech Hub's Nadiyah Johnson. The final activity is a poetry-writing prompt. To enter the contest, follow the prompt, then complete the form and submit your poem at this link: https://bit.ly/39lg76g.

Our Poetry Contest submission deadline is March 31st.

A jury of readers will review all entries. A winner will be notified the week of May 2nd.