




Joy  
Buolamwini  
**computer scientist,  
founder of the  
Algorithmic Justice  
League**



[www.anewpipeline.org](http://www.anewpipeline.org)




**Joy Buolamwini** found that facial recognition software was often biased—it misidentified women and people of color at much higher rates. She founded the Algorithmic Justice League to help raise awareness about this problem and the issues it causes.

Fun facts:

- She is a “poet of code” who uses art and research to illuminate the social implications of AI
- She testified to Congress about bias in facial recognition software
- She was born in Canada and grew up in Mississippi
- She was a competitive pole vaulter in high school



# *Machine Learning & Algorithmic Bias*



Machine learning is a way to teach a computer a complicated concept by giving the computer a lot of examples of the thing you want it to learn. Computers can use the examples to teach themselves by picking out patterns and similarities in the examples and then applying those patterns to new data. This method makes it much easier to teach computers complicated tasks, but the computer is only as good as the examples it's given. A bad set of examples can have unintended consequences.



# Lesson idea:

1. Introduce Joy Buolamwini and algorithmic bias with the information above
2. Watch [AI, Ain't I A Woman?](#) (3:32) by Joy Buolamwini that shows bias built into current facial recognition technology
3. Explore algorithmic bias with our [Introduction to Algorithmic Bias](#) activity that asks students to come up with a dataset to teach a computer to recognize great art!

# Explore further

Learn more about Joy Buolamwini, machine learning, and algorithmic bias with these resources:

## Videos

- [AI, Ain't I A Woman?, Joy Buolamwini](#)
- [AOC & Buolamwini clip from House Hearing on Facial Recognition Technology](#)
- [Joy Buolamwini: How I'm fighting bias in algorithms](#)
- [Coded Bias](#) film
- [Kenneth Cukier: Big Data is Better Data](#)

## Activities

- A New Pipeline's [Introduction to Algorithmic Bias](#)
- Code.org's [AI for Oceans](#)
- [Machine Learning for Kids](#)

## Reading

- [Wrongfully Accused by an Algorithm](#), New York Times
- [Man is to Doctor as Woman is to Nurse: the Gender Bias of Word Embeddings](#)
- [Companies are on the hook if their hiring algorithms are biased](#)
- [Technically Wrong](#) by Sara Wachter-Boettcher