# **Bias in Artificial Intelligence | Equality Summit**

Artificial intelligence is advancing fast and taking importance in our daily lives, but as Joy Buolamwini explains in this presentation about the study of Gender Shades, many times these AI systems are highly biased in terms of equality making a huge impact on marginalized communities. For this reason Joy Buolamwini discusses the need to use ethical practices and have in mind the equality in AI development after seeing the results of her study with face recognition systems.

Now we are going to talk about the main ideas of this presentation:

* Algorithm bias on artificial intelligence

The AI systems can have biases due to the training data that we have used for the training, driving those systems to be skewed in favor of male faces and lighter skin tones. In the study Joy Buolamwini shows that most systems accuracy when trying to identify darker-skinned people and darker-skinned women in particular are substantially worse than for lighter-skinned people and lighter-skinned men, showing inequalities in these AI systems.

* Intersectionality

Joy Buolamwini's study emphasizes the importance of examining AI performance through an intersectional way. She found in this study that lighter-skinned males achieved almost perfect accuracy rates on different companies' AI systems, while darker-skinned females obtained huge error rates. This intersectional analysis reveals disparities and biases on this AI’s.

* Impacts of the artificial intelligence biases

These biases have a big impact on key aspects of our society, these systems nowadays are highly used for law enforcement, hiring and much more.

We already have seen a facial recognition system used to identify criminals where the 91% of people classified as a criminal were innocent.

Similarly, many companies use AI for the hiring process, doing workplace discrimination due to the data biases.

* Ethical AI development

Joy Buolamwini reinforces the need for transparency and ethical development for these technologies with the Gender Shades study and the Safe Face Pledge initiative, encouraging companies to fix these biases and make sure that their AI systems ensure inclusivity and integrate ethical standards.

Looking at this presentation we can conclude that our AI systems will represent the biases that our society has. For this reason we need to take action and ensure that these types of systems are not trained with biased data to avoid any type of biases based on race, gender, skin colour or any similar. The study driven by Joy Buolamwini is a powerful reminder that AI must reflect the whole diversity of the world. Only then will AI be able to do good for our society becoming a tool for equity and justice rather than perpetuating existing disparities.

The study Gender Shades, shows that most of the companies like Amazon, IBM, Microsoft and others had huge biases on their AI systems, showing the importance of initiatives like Safe Face Pledge, that ensures that the companies have take into account the inclusivity and equality when training their AI, and making easy for the companies that want to consume this products ensure that is not biased.Even when this companies have corrected this biases after the study, all this shows the dangers that this technology have and makes clear that we need to take into consideration as professionals the huge impact that this type of biases can have.