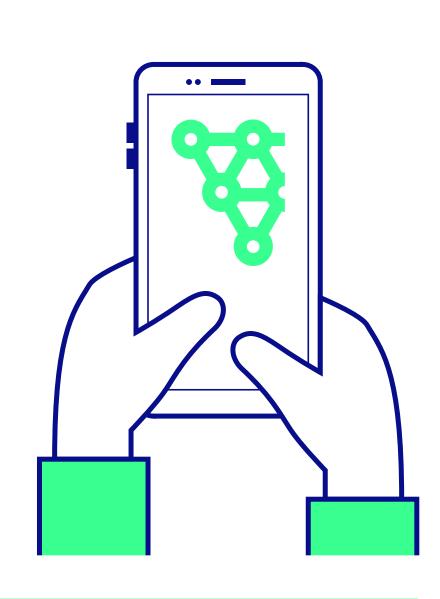


# Gender bias in artificial intelligence (AI) and algorithms



# **Are algorithms neutral?**

In general, the logic and mathematical foundations on which artificial intelligence (AI) and algorithms are based are independent of **social** dimensions. However, the practical application of AI can be influenced by a flawed experimental design, including the **use of biased** or **inaccurate inputs** or **data**. In such cases, the results obtained do not reflect

the complexity and diversity of current society. In these cases, erroneous results can be generated which discriminate against a part of the population for reasons of gender, race, sexual orientation, or functional diversity, among others.

The growing interest in the use of algorithms is the result of a demand for a smarter

decision-making process based on scientific evidence. Algorithms let us **transform** data into knowledge, but we must always process this data correctly with the support from **interdisciplinary teams** made up not only of programmers, but also of experts in mathematics, statistics and different areas of the social sciences (including ethics).

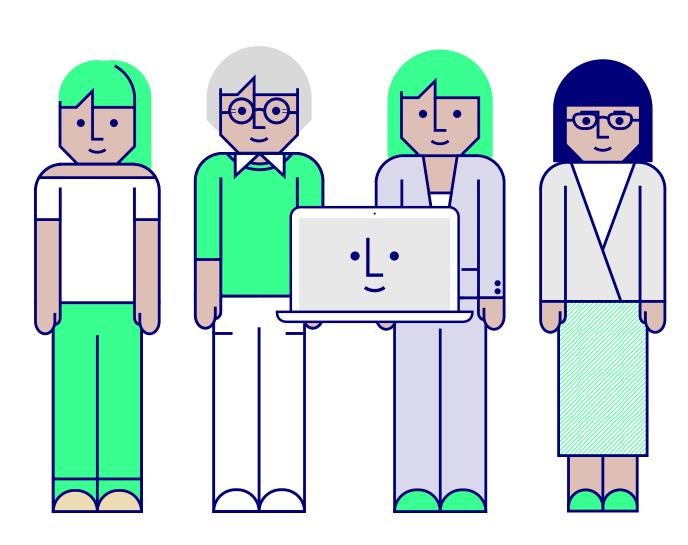
# The lack of diversity in Al

There is still a 'digital divide' between men and women. There are many more men than women enrolled in some university programs such as computer science, and women are underrepresented in the design and production of products and services linked to AI algorithms.

#### Percentage of women in the AI sector

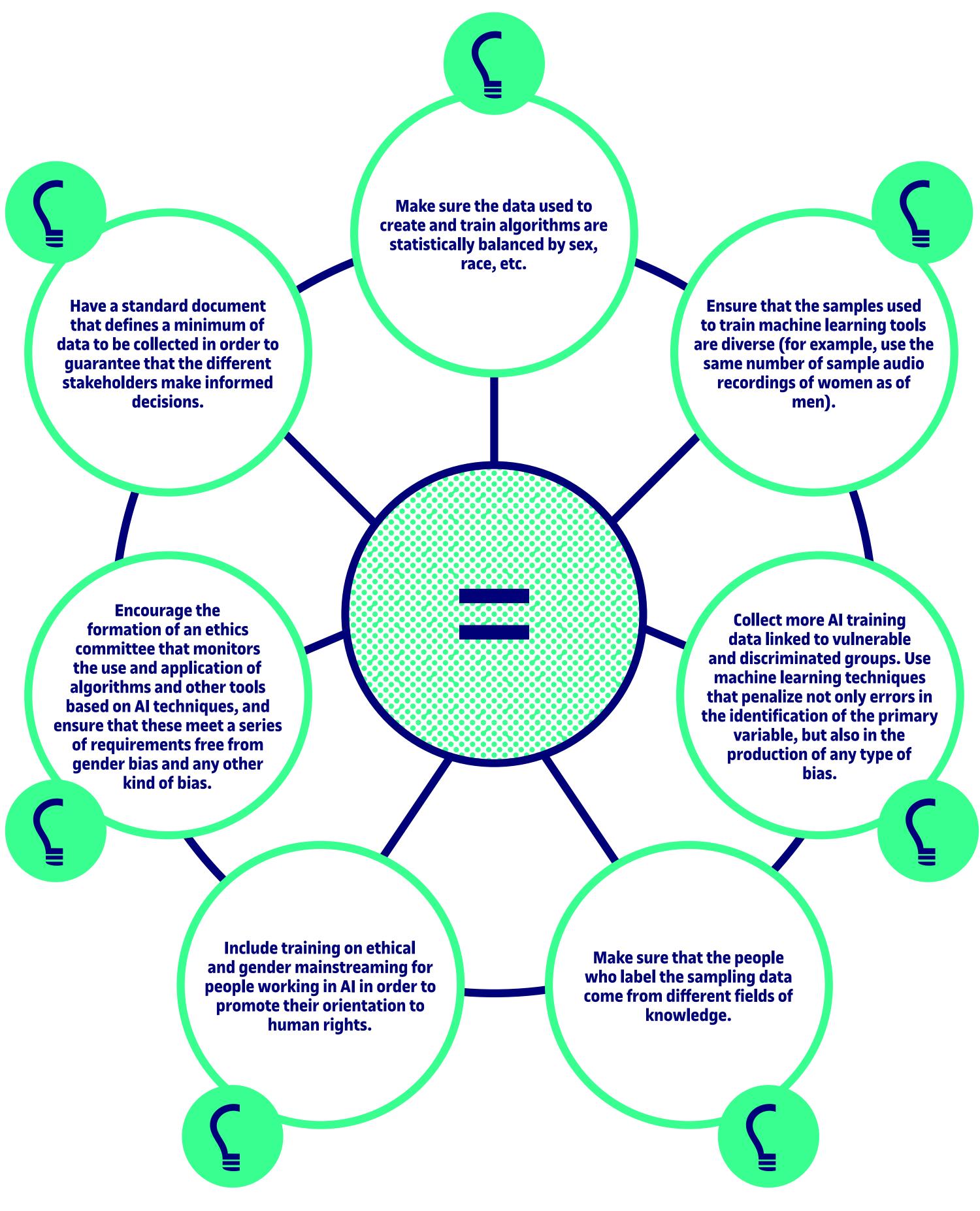
26% of people working in AI and data science

Source: World Economic Forum Report 2020



**16%** of tenure-track faculty specialized in AI Source: The AI Index 2021 Annual Report

### Recommendations to overcome gender bias, and improve equity and reliability in Al systems



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# **GENDASH** network

Produced within the framework of the Gender and Data Science in Sport and Health (GENDASH) network, financed by the High Council of Sports (CSD) – Spanish Ministry of Culture and Sport (Ref. 02/UPR/21).







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