

International Women's Day Conference:
L-Intelliġenza Artifiċjali u l-Ugwaljanza bejn is-Sessi

4th March 2020

Villa Arrigo, Naxxar

Ms Laiviera

Introduzzjoni: Għalfejn qed nitkellmu dwar l-Intelliġenza Artifiċjali b'rabta mal-ugwaljanza bejn is-sessi?

- In A.I, machines learn from the data inputted by humans based on what they have learned, reproducing stereotypes and reflecting inequality between women and men
- A.I systems can reproduce discrimination and inequality because of bias in design
- Is the current legal framework sufficient to address AI-related discrimination?
- We need to increase A.I opportunities for both women and men

• **Dr Claudia Borg**

L-aspett tekniku: X'inhi l-Intelliġenza Artifiċjali u b'liema mod tista' twassal għad-diskriminazzjoni?

- A.I. is a way of gathering information - systems that have specific goals
- We use A.I continuously, and these systems can keep data about us. For instance, *Google Maps* now knows where I am and probably why – through my emails
- A.I is used in hospitals, in cars, in wars and other spheres, impacting our lives.
- There are 3 stages of A.I:
 1. Narrow A.I – trained to do a specific task
 2. General A.I - able to do different things
 3. Super A.I – perform better duties than humans
- Nowadays most of the A.I. systems are Narrow A.I, moving to General A.I.
- A.I systems are able to learn on their own. For instance, A.I systems know how to rule and play a particular game

- One of the main issues is that we do not know what they are learning, building algorithms that reflect cultural biases. For instance, male names associated more with math, female names with arts
- Embeddings for competence adjectives are biased toward men. For example: *smart, wise, brilliant, intelligent, resourceful, thoughtful, logical, etc.*
- How can we establish trust in A.I systems? We cannot have A.I systems if we do not know how they work. In view that data is fed in a machine learning algorithm, we need to evaluate and check what it is saying. It is important to dig in the results of A.I. systems, without taking for granted that A.I. is working on the right premise. This is crucial in relation to bias and discrimination

- **Prof Brenda Murphy**

L-aspett soċjali: Kif u fejn nistgħu nesperjenzaw diskriminazzjoni minħabba l-użu tal-Intelliġenza Artifiċjali?

- Algorithms of oppression: women experience discrimination because these systems reflect what is going on out there
- If women are not contributing enough in the A.I. sphere, there will be no gender equality
- We have to make sure that people in A.I are coming from a diverse backgrounds
- We are looking for a bias free world, bias free A.I. We have to think fresh... we must remember that it is not about the machines, it's about the people. We need to consider data
- A.I appears neutral but it is still made by humans
- We have an obligation to create a world free from biases

- **Discussion**

- We can use A.I. to detect our unconscious bias, if we really choose to look into A.I. systems

- Increasing women in the ICT sector has been one of the Malta's Eskills Foundation's objectives, who published guidelines on how to increase and retain women in ICT
- The reasons why women choose certain areas of employment over others need to be analysed. This is about structures, ways of thinking and unconscious bias

- **Mr Bernard Montebello & Ms Greta Attard - MDIA**

- ***L-aspett legali u regolatorju – Il-principju tal-ugwaljanza jista jigi integrat fl-Intelliġenza Artifiċjali?***

- A.I systems are used in various sectors such as: Real Estate, Tourism and Manufacturing
- In August 2019, Malta published a draft framework on A.I, in order to establish a set of principles and more control over A.I. systems
- This Malta Ethical A.I. Framework sets out four principles:
 1. Respect for human autonomy
 2. Prevention of harm
 3. Fairness
 4. Explicability
- The development and use of AI systems must be fair.
- We must ensure that individuals and groups are free from unfair bias, discrimination and stigmatisation.
- The MDIA Certification programme certifies trustworthy A.I. systems

- **Discussion**

- Education is key so that we can recognise 'deep fakes'. In addition, A.I. can help us to verify the veracity of information online
- It is difficult to understand what data is used in an A.I. system. Enforcement is required to verify data that can affect people's lives
- Employees in the A.I. sector should be trained to identify discrimination

- **Panel Discussion**

Diskussjoni – L-Intelliġenza Artifiċjali u l-ugwaljanza bejn is-sessi: il-kuntest Malti

- We need a solid infrastructure that caters for A.I. systems - education is the key
- HR employees should be knowledgeable in A.I.
- We should not make any generalisations on specific groups of women and men as a result of A.I. outcomes
- Despite youths and children are more used to digital technologies, they may not necessarily be gender sensitive or aware of gender biases in A.I.
- Further awareness on business ethics and education on A.I. are required
- Women are under-represented in the A.I. sector
- Prejudices on scientists, engineers and persons working in digital technologies should be combated, as such jobs tend to offer good working conditions and flexibility
- More women role models in STEM can contribute to encourage more girls to study and work in this sector
- Biases and discrimination in other sectors should not be repeated in A.I. sector
- Various jobs in the future will require digital skills and knowledge of A.I.. Thus we must prepare for this new culture