

'Putting Science Into Standards' workshop

#### Welcome! We will start soon

#### **AI for Education and Employment**

9 June, 9:15-10:30







#### **Roundtable speakers**

#### **Dee MASTERS**

Cloister

#### Enrique FERNANDEZ MACIAS

**EC Joint Research Centre** 

#### Nikoleta GIANNOUTSOU

EC Joint Research Centre

Rapporteur: Songül Tolan & Matteo Sostero (JRC)



### **Audience interaction**





- ✓ Select the **Education and Employment** room on Slido
- Zoom chat only technical questions to host
- S Camera and audio OFF



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## Dee MASTERS Cloister



## Professional background



Dee Masters

- Discrimination lawyer at Cloisters with specialism in AI and emerging technologies – see <u>www.ai-lawhub.com</u>
- Supporting the UN Special Rapporteur on the rights of persons with disabilities in relation to recent report on AI and discrimination
- Co-author of "Technology Managing People the Legal Implications" for the TUC in the UK which informed its manifesto
- Devising and delivering training on AI and discrimination for Equality Bodies for the Council of Europe

► Advising business, governments and individuals on AI © CEN-CENELEC 2022 Putting science into standards' workshop – Data guality requirements for inclusive, non-biased and trustworthy AI

### Challenges Faced & Solutions



- Transparency: Data is used to make key decisions about employees and workers without them understanding what data is used, how that data is used, and what conclusions have been drawn.
- Discrimination is 'hidden': How are employees or workers to know that the tool is discriminatory?
- Disabled people: Emerging technologies appear unable to accommodate people who are `different' because it makes predictions about people based on generalised data.

#### Accuracy: What do `accurate' tools look like when it comes to using tools at work?

## Way Forward, Next Steps



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- Personalised explanations: Employers should only be permitted to use AI or ADM to make important, high risk decisions (e.g. who to dismiss) where those decisions can be explained and understood by employees.
- Disabled people: A means of understanding and validating whether reasonable accommodations have been made for disabled people, and, that disabled people are appropriately represented in data sets.
- Data reciprocity: Employees (collectively or individually) should be able to harness the benefits of 'big data' e.g. to assess whether a tool is discriminatory.

#### Accuracy: Development of accepted standards around accuracy



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Thank you!



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**Enrique Fernández-Macías EC Joint Research Centre** 



### My background is in the sociology of work and labour economics

►I do research on the impact of technical change on work and employment

Lately, I have been studying digital labour platforms in Europe (employment status and working conditions). This brought me to the broader topic of the growing use of algorithms for the organisation of work in all kinds of firms.

### Challenges Faced & Solutions



Key issues in the algorithmic management of work: data ownership, privacy, (lack of) autonomy, transparency in decision-making, power imbalances.

►No clear solutions yet. Different approaches: external auditing, social dialogue, mandatory transparency and/or regulated decision-making.

General problems: opacity (legitimized by intellectual property and business practices), complexity (especially when algorithms driven by AI)

# Way Forward, Next Steps



What's missing in the current regulatory and standardisation landscape of algorithmic management? Nearly everything!

- ► No clear common terminology
- ► More research needed on implications, to identify key parameters
- ► No established metrics
- ► Hardly any (specific) regulation

► What way forward? New problems may require new solutions

- Open source model: decentralised model of control based on high transparency and open collaboration
- External data trusts where workers' representatives could access algorithms and data, for auditing and negotiating them.



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Thank you!



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## Nikoleta GIANNOUTSOU EC Joint Research Centre

# Professional background



- Background on digital education: research, design and evaluation of digital learning environments (intelligent tutoring systems, exploratory environments, robotics, AI supported collaborative learning, virtual and augmented reality).
- Project manager of SELFIE (<u>https://schools-go-digital.jrc.ec.europa.eu/</u>) supporting strategic decision making of schools on the use of digital technologies
  - ► Questionnaires for 5 ISCED levels in 39 languages
  - ►3.3 million users (school leaders, teachers, students) from 88 countries
  - Anonymous participation
  - ► User generated data

# **Digital Education Data**



Different perceptions of terms related to digital education

- Same term: differentiation between users | Human intervention
- ► Same tool pedagogy: many different implementations | Examples
- Translations: no one to one correspondence between terminologies Contextualization - examples
- Fluidity: New terms emerge often and there is time needed to build consensus about the terminology
- Anonymity & Openness: Double sword depending on the context

# Way Forward, Next Steps



- SELFIE as an instrument for the implementation of AI standards and guidelines at schools
- Currently Emphasis on standards for the human and AI
- Need to identify how to regulate the symbiotic relationship between AI and humans. This might include:
  - ► Identify who are the key actors and what could be their role
  - Middle level management (more autonomy and responsibility to the schools to handle AI in their schools)
  - NGOs and other players facilitating training, tech maintenance, strategic design



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Thank you!



European Commission

Programme – what's next? 📴 CENELEC

13:30 - 16:00	Main Plenary room
12:00 - 13:30	Lunch break
10:45 - 12:00	Parallel sessions (Media/ Medicine & Healthcare/ Industrial Automation & Robotics)
10:30 - 10:45	Coffee break



Please check your email for the links to access the parallel session of your choice



The link will also be published on Slido and Zoom chat

### Let's take a break!





### **COFFEE BREAK**

Join the parallel session of your choice at 10:45!