Facing AI socio-technical challenges in vulnerable group: design for child-centered responsible innovation.

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ACM Reference Format:

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Elisa Rubegni. 2023. Facing AI socio-technical challenges in vulnerable group: design for child-centered responsible innovation.. 1, 1

1 WHY DO YOU WANT TO PARTICIPATE?

Racist and sexist behaviours can stem from biased and inaccurate development of social and cultural categories about gender and race in children from the earliest childhood. These biases are generated and spread through social interactions and cultural artefacts including, increasingly digital technology and AI-based systems. There are significant social, educational, and economic costs of failing to challenge the spread of such biases. The difficulty of challenging biases is due in part to the constant exposure of children to messages infused with stereotypes that influence their attitudes about themselves and about others starting from a very young age. My experience in conducting research on child-computer interaction clearly showed the urgency and importance of creating new discourses to challenge socio-technical issues that emerged from AI-based systems. Considering these new challenges and the type of topics I am investigating in my research embracing a responsible innovation perspective is incontrovertible. The Responsible innovation approach is meant to support building a healthy environment in which children are protected as well as having an active role in the process of shaping their reality and AI-based technology.

2 WHAT CAN YOU CONTRIBUTE?

29 I aim to contribute to the workshop by exchanging my experience and research outcomes from projects in which 30 I have been challenging these issues. In particular, I wish to promote the conversation around how the community 31 32 could better create new discourses to support the design of AI-based systems with a strong responsible perspective. 33 In addition, I strongly claim the need of designing activities and AI-based systems for children that could trigger 34 their critical perspective and sense of awareness towards themselves and the AI-based system surrounding them. 35 This aims to challenge children's beliefs and stereotypes and, eventually, to guide them to a healthy and fulfilling life, 36 37 preventing future unemployment and social disadvantage. These two directions can help to go further towards a more responsible innovation direction through a more conscious engagement of pupils in the process and the implementation of mechanisms based on a critical perspective where children become active agents in this process and the overall 40 approach benefits from this and goes in the direction of making our research more ethical as it will take the responsibility 41 42 of including this new knowledge within the process.

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3 WHAT DO YOU WANT TO GET OUT OF THE WORKSHOP?

I aim to learn from other participants (and the organisers), to contribute to the debate, to come up with a better comprehension of this topic and potential ways to address it. I aim to be involved in activities and conversations that allow me, and the other participants, to reflect on the different facets of this topic. During the workshop, I hope that starting from our expertise and experiences to have a better understanding of the scope of this research area and have the opportunity to learn from each other on new perspectives to address it. This area of research is also strongly based on cultural background thus I am very interested to know how people from different geographical regions and backgrounds have faced it and what potential methodological approaches could help to face these challenges.

¹⁰⁴ Manuscript submitted to ACM