

Co-Creation and Co-Design Methodologies to address Social Justice and Ethics in Machine Learning

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Teaching HCI for AI: Co-design of a Syllabus

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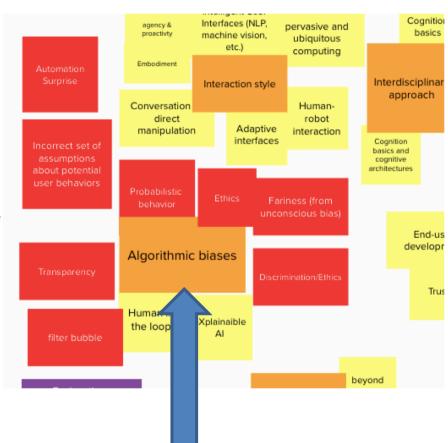
RATIONALE

• What theories and design methodologies should be used for creating AI systems that best empower people?



Context and Background

- Algorithmic bias has been recognised as a relevant issue in AI applications
 - e.g. Training set privileging one arbitrary group of users over others.
 - Joint Technical Committee (ISO/IEC-SC42) for the development of standards related to AI which covers algorithmic bias
- Little research on how mitigation strategies work in practice
 - Current literature mostly focused on the USA but UK or Europe have different governance and circumstances
- Existing tools
 - Guide to the Ethical Design and Application of Robots and Robotic Systems by the British Standards Institute
 - As of 2019, 84 Al guidelines or ethical principles
 - Most of those are not easily actionable in practice





Co-Creation and Co-Design Methods

- Will need to be <u>highly inclusive</u> involving engineers, social scientists, policy-makers and citizens
 - Co-Creation: Design Fictions
 - Co-Design and Participatory Design
- Those methods can:
 - stimulate reflections on <u>accountability</u>, fairness and transparency of Al algorithms <u>at design time</u> before deploying such algorithms in the society and potentially causing exclusion and inequality
- <u>Educating the next generation of AI developers</u> to adopt co-creation and codesign methods at design time
 - Positively affect companies they will be working for, e.g. by being able to launch AI-based products into the market with a <u>lower risk of social</u> issues
 - The society will indirectly benefit from such approaches by having access to Al-based applications carrying a lower risk of bias



https://not-equal.tech/

Thank you

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