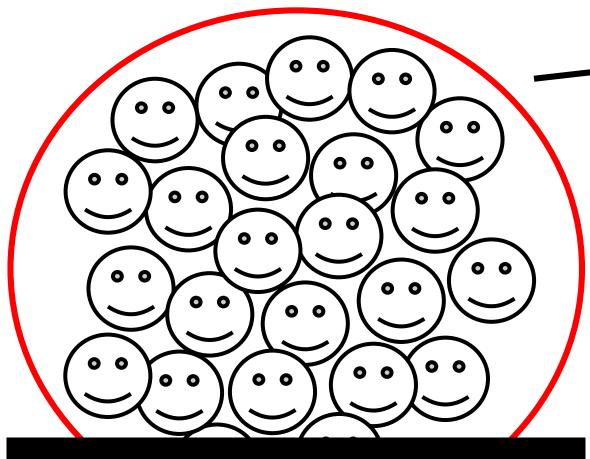
How could we prevent information from dividing our society?

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Minao Kukita Graduate School of Informatics, Nagoya University Japan What are key social science issues and gaps in the area of robotics, automation and AI?

- IoT, big data and AI could be used to detect and/or help people suffering, sometimes without anyone's knowledge, from diseases, poverty, abuse, exploitation, unfairness and other social injustice.
- However, these technologies seem to be used more often for relentless pursuit of benefit or power by large companies and authorities, resulting in infliction of harm on already socially vulnerable people.
- Thus, ICT helps intensify discrimination and widen the divides in our society.

Where statistics goes wrong



This guy comes from that group, therefore will be violent with the probability of 80%



80% out of this group have a tendency toward violence

This guy is dangerous, so let us remove him. Which areas are opportunities in the area of robotics, automation and AI?

- Instead of greedily pursuing profit, efficiency and power, we can use these technologies in order to find, help and empower vulnerable people.
- Medical science and practice, social welfare, or education are obvious fields.

How can these opportunities be advanced by UK and Japanese researchers coming together?

- We can together develop ways to evaluate how ethically a technological product is designed and used.
- We should focus not only on how much profit it will bring to the users, but on where the profit will come from, who will be exploited, whether it is safe against abuse, what shortand long-term effects it will have on our values.
- In addition, we could explore ways to promote people's ethical and rational thinking and behaviours by embedding morality and other values in the designs of technological artefacts.