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## AI & RESEARCH: DATA PRIVACY

### Topics:

- What is AI?
- Privacy considerations for AI
- Mitigating bias in AI algorithms
- Keeping data secure & confidential when using AI

## Artificial Intelligence

*“Artificial Intelligence (AI) leverages computers and machines to mimic the problem-solving and decision-making capabilities of the human mind.”*

- IBM

### Data protection is crucial when considering AI.

Here are a few key points to keep in mind when deciding to use or build an AI platform.

- Be transparent how data will be used and processed and include this information in your project
- Only use the minimum necessary data to get the job done
- Review the site’s terms of use and terms and conditions
- Allow participants to have a say as to how their data will be collected & used
- Minimize the collection and processing of personal data/PHI

### Eliminate “preference bias.”

PLOGS Digital Health suggest these steps to mitigate bias when utilizing AI algorithms:

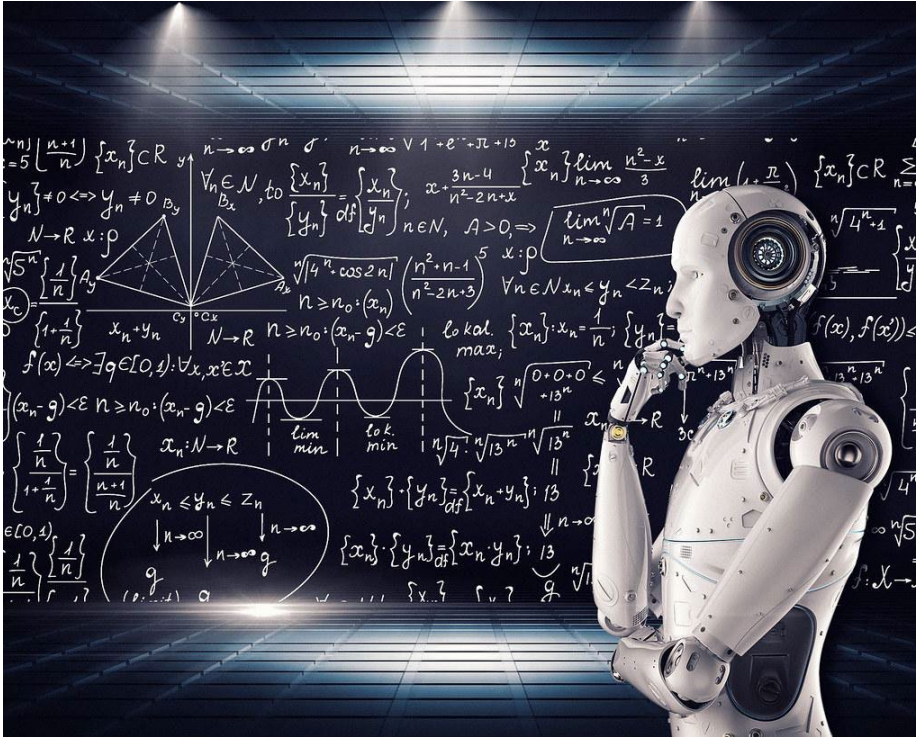
- Correct framing of the problem
- Data diversification & representation
- Identifying sources of the bias
- Managing the data in pre-processing
- Eliminating bias during model development and validation

Remember, results may not always be accurate, evaluate it for accuracy

Test the system to assure biases have been mitigated

## Safeguarding Data:

- Obtain informed consent from participants
- Utilize appropriate data collection methods
- Securely store data
- Use strong encryption methods
- Control and limit who has access
- Ethically use data and dispose of data safely



### References:

PLOGS Digital Health | <https://doi.org/10.1371/journal.pdig.0000278> June 22, 2023

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