

A Very Brief Introduction to Ethics in Al



Artificial Intelligence is the study of "rational agents": any system that perceives its environment and takes actions that maximize its chance of achieving its goals.

- Russell & Norvig (2003)



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Dec 2020 EO 13960: Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government

| Lawful & respectful of Nation's values | Purposeful & performance-driven | Accurate, reliable, & effective |
|----------------------------------------|---------------------------------|---------------------------------|
| Safe, secure, & resilient | Understandable | Responsible & traceable |
| Regularly monitored | Transparent | Accountable |

Oct 2022 OSTP: Blueprint for an Al Bill of Rights: Making Automated Systems Work for the American People



Safe and Effective Systems



Algorithmic Discrimination Protections



Data Privacy



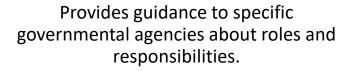
Notice and Explanation



Human Alternatives, Consideration, and Fallback

Oct 2023 EO: Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence.







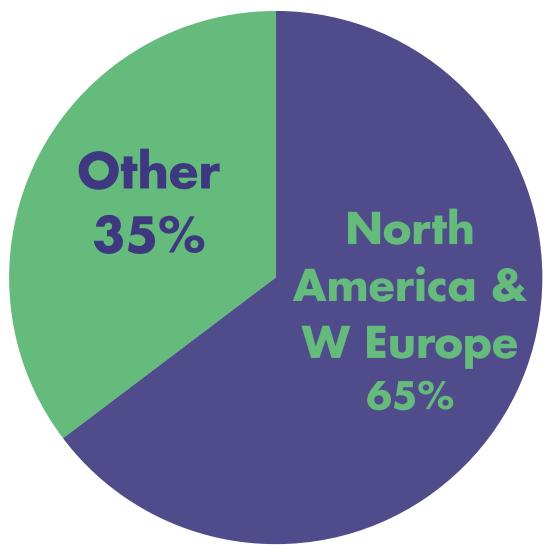
Sets timelines for the creation of governing bodies and reports on AI technology progress and safety measures.



Reaffirms that the U.S. should remain a leader in both innovating and utilizing AI technologies.

ImageNet Country of Origin







Source: Shankar, S, et. al. (2017). No classification without representation: Assessing geodiversity issues in open data sets for the developing world Retrieved from: https://oreil.ly/VqtOA.



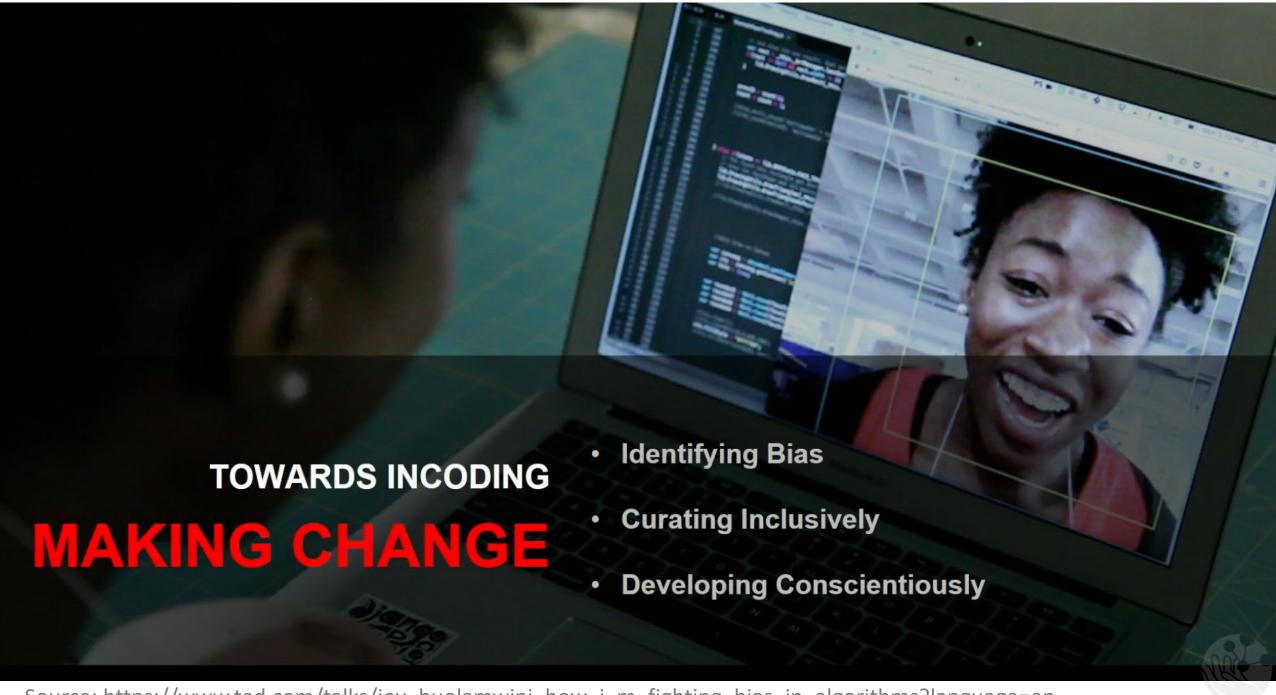


Nepal, 288 \$/month

Azure: food, cheese, bread, cake, sandwich
Clarifai: food, wood, cooking, delicious, healthy
Google: food, dish, cuisine, comfort food, spam
Amazon: food, confectionary, sweets, burger
Watson: food, food product, turmeric, seasoning
Tencent: food, dish, matter, fast food, nutriment









THE SIX PRINCIPLES



.1 Transparency

Al systems must be understandable to all_



.2 Inclusion

These systems must not discriminate against anyone because every human being has equal dignity_



.3 Accountability

there must always be someone who takes responsibility for what a machine does_



.4 Impartiality

Al systems must not follow or create biases_



.5 Reliability

Al must be reliable_



.6 Security and Privacy

These systems must be secure and respect the privacy of users_



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