DATA POLICY AS TRANSLATIONAL ETHICS

DAVID DANKS

DATA SCIENCE // PHILOSOPHY UNIVERSITY OF CALIFORNIA, SAN DIEGO

WHAT IS ETHICS?

■ No: "mere" compliance or legal rules

■ **No**: sole province of philosophers

Yes: What should our values be?
And how should we act to advance those values?

WHAT IS ETHICS IN DATA SCIENCE?

- Key goal of data science is to build models
 - Descriptive, Predictive, Causal, ...
 - Model evaluation & use depend on goals & needs (= "what matters")
- Ethical & value decisions at every step of the "pipeline"
 - "What problems are worth solving?"

• • •

"What errors should be addressed?"

Values & ethics are always part of Data Science!

TWO APPROACHES TO AI & DATA SCIENCE ETHICS

Top-down: Start with normative ethical principles
 Apply to particular cases of Al & Data Science

Bottom-up: Start with facts about Al + ethical understanding
 Develop principles & concepts appropriate to Al

TWO APPROACHES TO AI & DATA SCIENCE ETHICS

Top-down: Start with normative ethical principles
Apply to particular cases of AI & Data Science

Dominant Approach

Bottom-up: Start with facts about Al + ethical understanding
 Develop principles & concepts appropriate to Al

PRINCIPLED ARTIFICIAL INTELLIGENCE

A Map of Ethical and Rights-Based Approaches to Principles for Al

Authors: Jessica Fjeld, Nele Achten, Hannah Hilligoss, Adam Nagy, Madhulika Srikumar

PRINCIPLED APPROACHES

A Unified Framework of Five Principles for AI in Society

Authors

Authors and affiliations

Luciano Floridi 🖂 , Josh Cowls

Artificial Intelligence at

The global landscape of AI ethics guidelines

Anna Jobin, Marcello Ienca & Effy Vayena ≥



9 ethical Al principles for organizations to follow

HOME > REPORTS & RECOMMENDATIONS > ARTIFICIAL INTELLIGENCE

5 PRINCIPLES OF DATA ETHICS FOR BUSINESS

Intelligence Community
Principles of
Artificial Intelligence

eering and Research (Aether) Committee, and Responsible Al Strategy in Engineering Committee advises our leadership on the challenges and opportunities presented by Al ts our rules and governance processes, working closely with teams across the company to

ISE is a team that enables the implementation of Microso



The OECD AI Principles

SHORTCOMINGS OF PRINCIPLES

Universal rather than context-sensitive

No decision procedure for conflicts

Properties of end-states not processes

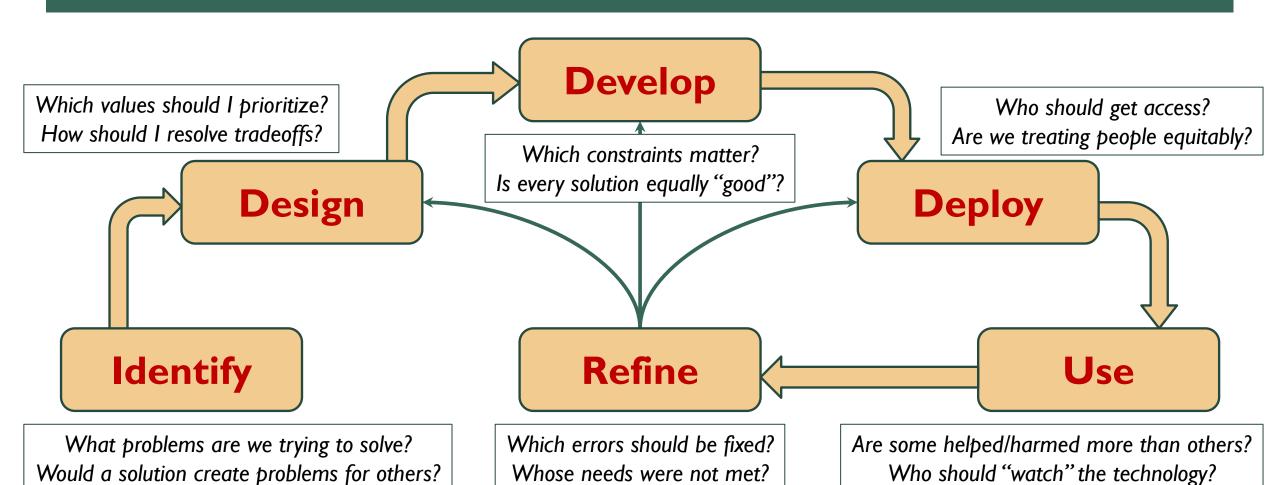
TWO APPROACHES TO AI & DATA SCIENCE ETHICS

Top-down: Start with normative ethical principles
 Apply to particular cases of Al

Bottom-up: Start with facts about AI + ethical understanding Develop principles & concepts appropriate to AI

Translational Ethics

INTERVENTION POINTS



DATA POLICY AS TRANSLATIONAL ETHICS

- Base our policies in actual practices, situations, needs
 - ⇒ Policies support principles, not translate them

- Example policies about...:
 - when to pursue a data science effort
 - how to document data & models
 - how to implement human-algorithm interaction

CONCLUSIONS

Ethical (& societal) considerations are central to data science

Principles provide ideals, not implementations

Data policies & practices are a form of translational ethics

THANKS!

www.daviddanks.org ddanks@ucsd.edu // david@danks.org

Key conversationalists:

- Dwight Barry
- Sina Fazelpour
- Riccardo Fogliato

- Emily LaRosa
- Zack Lipton
- Alex John London
- Osonde Osoba

- Alka Patel
- Kerstin Vignard (and many others)