IF KNOWING IS HALF THE BATTLE

THE OTHER HALF IS BATTLING

Don't skip the first half

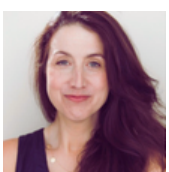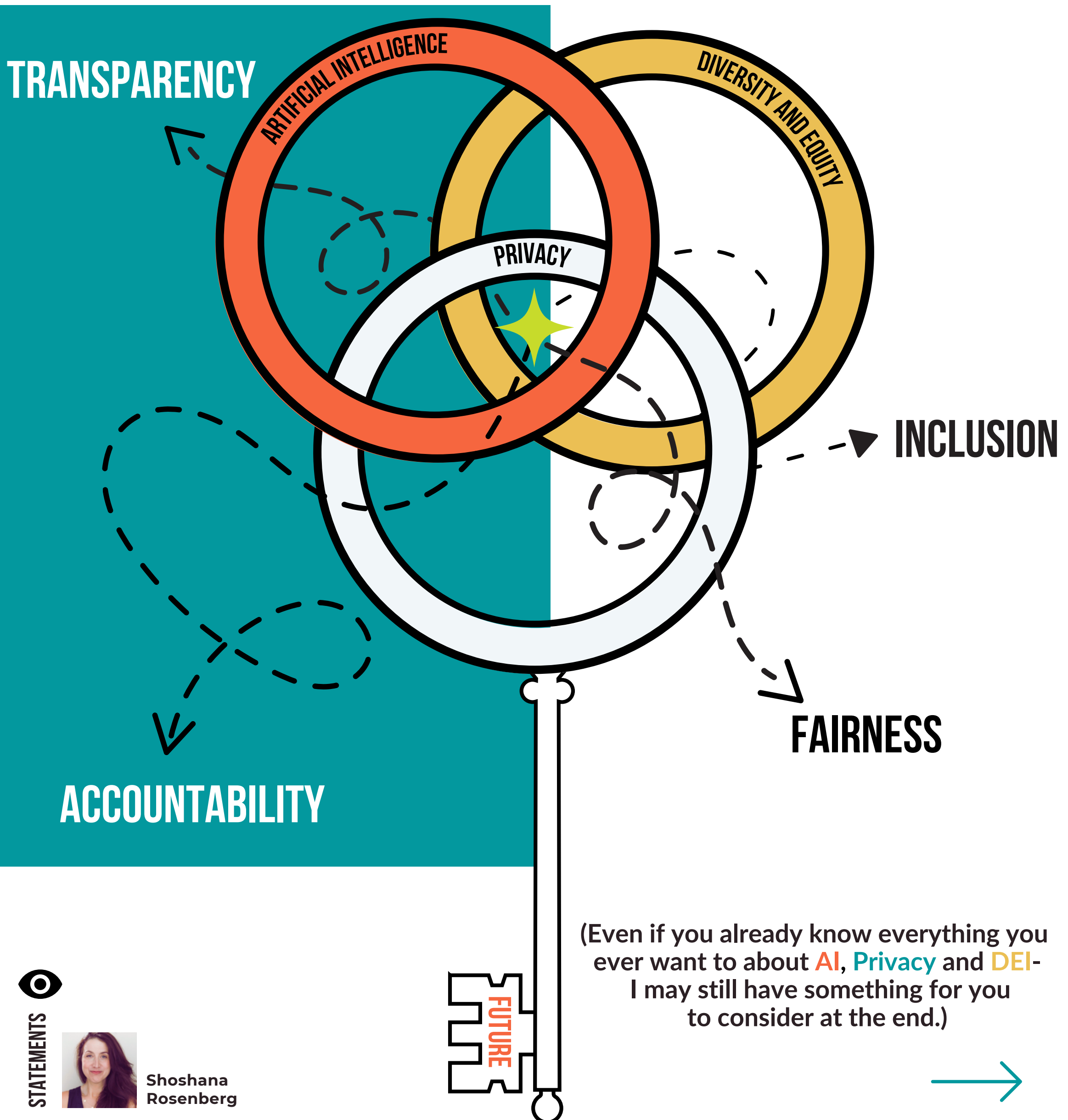A.I. DEPRIVACY
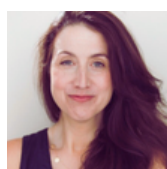
STATEMENTS

STATEMENTS

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WHAT WE NEED TO GET ANY OF IT RIGHT

TRANSPARENCY

ARTIFICIAL INTELLIGENCE

DIVERSITY AND EQUITY

PRIVACY

INCLUSION

FAIRNESS

ACCOUNTABILITY

FUTURE

(Even if you already know everything you ever want to about AI, Privacy and DEI- I may still have something for you to consider at the end.)

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Algorithms

STEPS FOR SOLVING A PROBLEM/PERFORMING A TASK

A.I. uses mathematical and logical equations to process data, to learn from it, and to make predictions or decisions based on that data in concert with the vast amounts of data it was trained on. **An algorithm is a recipe of sorts: a step-by-step set of instructions or rules to solve a particular problem.**

The Accuracy, Fairness, and Reliability of the decisions/predictions made by AI are greatly influenced by the Quality and Quantity of the training data, the new data, and the sophistication of the algorithm.

Neural Networks

COMPLEX ALGORITHMS FOR COMPLEX TASKS (IMAGE RECOGNITION/ NATURAL LANGUAGE PROCESSING)

A neural network is a *type* of algorithm; a multi-layered series of calculations designed to recognize patterns. (While all neural networks are algorithms, not all algorithms are neural networks.) **While neural networks are complex in nature, the level of sophistication of a neural network depends on the way it is built (imagine: how many different subway lines can exist and overlap), the depth (imagine: how many layers in the onion), and the methods of training used.**

Training Data

WHAT ARE YOU FEEDING THAT THING?

The data that an AI is trained on includes both data that represents inputs and the corresponding expected outputs. The quality of the training data is critical to the reliability and fairness of the AI system. **Training data should be accurate, representative, and unbiased, which is a tall order when so much of what is available on the internet and in the world cannot meet these requirements.**

Mitigating the Likelihood of Bias

YOU ARE WHAT YOU EAT: BIAS IN IS BIAS OUT

For AI outputs and decisions to be fair, just as with societies and workplaces, several things are needed to balance out bias and create equity: 1) **It must be recognized and acknowledged that bias exists,** 2) **we must have diverse teams and viewpoints present and involved in all aspects of building,** 3) we must be **vigilant in identifying bias,** 4) we must set **guardrails to ensure fairness,** and 5) **continuously collect candid feedback that** 6) **we take action and make changes based upon.**

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We will get to Training Methods, Ethical Decision Making, Transparency, Interpretability, and more next time.

PRIVACY

PERSONAL DATA PROTECTION →→→→→ ←←←←←

The fundamental premise of Privacy is the protection of an individual's Personal Information (important: this is not simply addresses and drivers license numbers, this is any information that relates or ties back to that individual) and their right to control, access and safeguard their own data.

PRIVACY RIGHTS →→→→→ ←←←←←

Though different local privacy and data protection laws and regulations provide and protect different explicit rights, Privacy generally contemplates all individuals having the RIGHT TO KNOW who is collecting their personal data, to know what their data is being used for, and why, and how long it will be kept, to know exactly what additional systems or entities will have access to their data, and why, to know where it is being stored (because of the pesky aforementioned differing protections in different locations), and how it will be protected. Where automated decisions (such as those made by AI or simpler algorithms or processes) are made that impact individuals based on personal data, individuals have the right to know and to contest such automated decisions.

Additionally, individuals should have the right to consent, refuse, or withdraw consent to the collection and use of their data. They should also have the right to: ACCESS what data is held about them and be able to take or make PORTABLE a copy of that information, CORRECT any incomplete or inaccurate personal data, and to DELETE (request deletion or erasure of) their personal information that is in the possession of organizations under certain conditions.
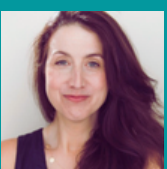
PERSONAL DATA MINIMIZATION →→→→→ ←←←←←

Data Minimization is a key principle in Privacy and data protection- it dictates that organizations should collect, use (we say "process") and hold (retain) ONLY the amount of personal data that is necessary for the purpose for which they have been granted access to it by the individual.

KEY COMPONENTS

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We will get to Consent, Transparency and Accountability, and more, next time. →

DEI

KEY COMPONENTS

Representation

Diverse representation, done right, creates an environment- be it within an organization, the media, a system, society or profession- where individuals across diverse backgrounds, identities and experiences are not only present and valued- but have influence and visibility as decision makers.

When individuals see themselves represented in an organization or group, they're more likely to feel welcome, and to trust that the organization will value them and their experiences.

Inclusion

Fostering Inclusion is about the active and intentional work that it takes to ensure that individuals from different cultural, ethic, or socioeconomic backgrounds- as well as those of differing abilities or neurotypes, ages or other vantage points, are not only present but also fully involved, welcomed, valued and integrated into all aspects of an organization, group, school or society. **Inclusion is focused on creating and working to maintain environments where everyone feels empowered not only to participate but to participate actively in decision making processes and to be truly heard.**

Inclusion requires **active measures to break down both barriers and bias, safe feedback mechanisms,** and **a willingness to make changes and refine initiatives in accordance with that feedback.**

Inclusion also requires a high level of commitment, flexibility, accountability and transparency- from the program,   the leadership, and the organization. **Inclusion is the difference between an organization that talks about diversity and one that embraces and nurtures it.**

Equity and Equitable Outcomes

Equity requires dedication to FAIRNESS in treatment, access, opportunities, growth and advancement for all. **It is not about treating everyone the same, but about addressing different needs and situations to attain balanced and equitable outcomes.** While equality means giving everyone the same resources or opportunities, equity is focused on distributing resources and opportunities based on the needs or circumstances of the individual (or traditionally under-represented or marginalized group) to ensure comparable outcomes. **Equity specifically requires thoughtful and differentiated approaches to account for different starting points or barriers.**

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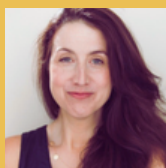
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We will get to Cultural Competency, Bias Awareness and Mitigation, and deeper into Accountability, and more, next time.

THE WAY I SEE IT

DIVERSITY, EQUITY, AND AI ARE THE FUTURE

AI will accelerate the interconnectivity of the world and will be deeply ingrained in all kinds of decision making processes.

DEI is essential for sustainable progress, innovation, and harmony.

Embracing DEI in the AI era is the only viable path to ensure that AI does not exacerbate or perpetuate existing biases and inequity.

INCLUSION IS THE KEY TO DIVERSITY AND EQUITY

Diversity will not be sustainable and equity not possible unless a full spectrum of the community is represented, integrated, accepted, respected and valued.

PRIVACY IS THE KEY TO INCLUSION

Inclusion cannot be fostered effectively without candid feedback and diversity identity data, both of which put indiviuals at risk without Privacy and true anonymity, and too often are collected without preserving their privacy rights.

DATA IS THE KEY TO AI

To ensure ethical AI, the data it is trained on must be diverse, representative, and gathered properly (with authorization and consent) and used responsibly.

AI CAN BE A KEY TO EQUITY

AI that is properly and thoughtfully designed with DEI principles can identify and help flag and rectify systemic disparities across any number of sectors and disciplines and processes, as well as helping to identifying gaps in the policies or tools that support them.

TRANSPARENCY AND ACCOUNTABILITY AND TRUST ARE KEY TO ALL THREE

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A.I., Privacy and DEI have a high level of interdependence and interconnectedness and are continuously evolving.

All three are tied directly to ethics, fundamental human rights, the future of work, and decision making and bias, which means:
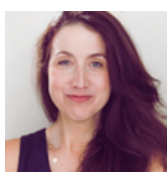
YOU AREN'T ON THE SIDELINES OF THESE THINGS.

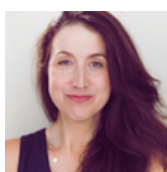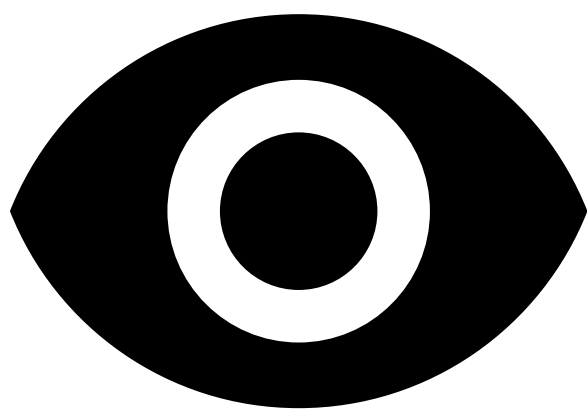## YOU ARE CRUCIAL TO THEM BEING WHAT THEY SHOULD.

Do you want to know more?

STATEMENTS

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