

# **Artificial Intelligence, Algorithmic Bias, and the Future of EDI in Organizations**

## **Primary Stream: Technology, Data & Digital Inequality**

## **Other Stream: Global Work and the Future of Employment**

**Abstract:** Artificial intelligence (AI) has rapidly diffused throughout organizations, reshaping hiring, performance evaluation, talent management, decision-making, and workplace monitoring. Yet despite these efficiencies, AI systems frequently reproduce or amplify existing inequities, often in ways that are opaque or difficult to detect. This Professional Development Workshop (PDW) addresses the fundamental tension between the promise of AI and its potential to exacerbate structural inequalities, especially for historically underrepresented and marginalized groups. The purpose of this PDW is to bring together scholars, educators, and practitioners across divisions to explore how algorithmic systems influence equity, diversity and inclusion (EDI) outcomes in organizations. Participants will gain deep insights into how algorithmic bias emerges, how organizations can audit AI systems for fairness, governance practices that support ethical and responsible AI, and new opportunities for theory building, data collection, and pedagogy in this rapidly evolving domain. The workshop is designed to be highly interactive, blending expert discussion with hands-on activities, scenario labs, and collaborative research development. Participants will work with simplified algorithmic demonstrations, engage in applied ethical decision-making, and co-create a set of emerging best practices for responsible AI. This session will appeal to the scholars of EDI, HR, organizational behaviour, technology, ethics, research methods, and management education. No technical background is required; all materials are accessible and practitioner friendly.

## **Workshop Format**

### **Part 1: Interactive Discussion — “Where Algorithmic Bias Comes From” (20 min)**

Introduction of foundational concepts, empirical challenges, regulatory developments, and organizational consequences of AI-driven inequities.

### **Part 2: Hands-On Mini Lab — “When Algorithms Discriminate” (20 min)**

Participants will work in small groups with mock HR datasets and simplified models. They will explore how design choices (training data, proxies, thresholds) create disparate impacts.

### **Part 3: Scenario Lab — “Responsible AI in Practice” (20 min)**

Working in groups, participants will analyze real ethical dilemmas, such as automated hiring, AI-based promotion decisions, worker monitoring, and transparency debates. Each group is expected to produce actionable principles for responsible AI.

### **Part 4: Policy Incubator (20 min)**

Participants will pitch policy ideas, share challenges, identify opportunities, and develop policy on AI and EDI.

### **Part 5: Synthesis & Takeaways (10 min)**

The session concludes with a collaboratively generated “Responsible AI + EDI Toolkit” shared with all attendees.

## Workshop Overview

### Workshop Details:

***Part 1: Interactive Discussion — “Where Algorithmic Bias Comes From” (20 min)*** This segment introduces participants to the foundational mechanisms through which algorithmic bias emerges in organizational contexts. The discussion begins by unpacking how historical inequities become encoded in data, leading AI systems to reproduce patterns that disadvantage certain demographic groups. Facilitators will highlight empirical challenges such as underrepresentation in datasets, biased labels created through subjective human judgments, and design decisions that privilege features or behavioral norms. Participants will also explore how algorithmic bias can arise during deployment—for example, when models interact with organizational processes, amplify informal practices, or respond to skewed feedback loops. The discussion incorporates recent regulatory developments, including evolving guidelines on automated decision-making, transparency, and fairness auditing. Through interactive polling and short case vignettes, participants will consider the real consequences of AI-driven inequities, such as exclusionary hiring outcomes, biased performance ratings, and reduced access to advancement opportunities. This foundation prepares attendees for the workshop’s hands-on and applied components.

**Part 2: Hands-On Mini Lab — “When Algorithms Discriminate” (20 min)** In this interactive mini lab, participants will collaborate in small groups to experiment with mock HR datasets that simulate hiring, promotion, and performance-evaluation scenarios. Using simplified, easily interpretable models, they will examine how algorithmic outcomes shift when key design choices are altered. Groups will test how biased or incomplete data can skew predictions, how seemingly neutral variables act as demographic proxies, and how threshold settings influence which candidates are screened in or out. Facilitators will guide participants

in identifying patterns of disparate impact by comparing model outputs across demographic subgroups. Participants will also explore trade-offs among common fairness metrics—such as equal opportunity, calibration, and demographic parity—to understand why mitigating bias is rarely straightforward. The lab emphasizes experiential learning by making small adjustments and observing immediate downstream effects and attendees will gain a concrete appreciation of how design decisions shape the equity implications of algorithmic tools. This segment builds practical intuition for auditing and improving AI systems in organizational settings.

**Part 3: Scenario Lab — “Responsible AI in Practice” (20 min)** In this scenario-based segment, participants will work in facilitated groups to analyze real-world ethical dilemmas that organizations face when deploying AI across the employee lifecycle. Scenarios include automated hiring platforms that inadvertently disadvantage certain groups, AI-supported promotion decisions that rely on opaque performance metrics, continuous worker-monitoring systems that raise privacy and autonomy concerns, and debates over transparency when communicating algorithmic decisions to employees. Each scenario highlights competing priorities—efficiency versus fairness, innovation versus accountability, and organizational goals versus employee rights. Groups will dissect the stakeholders involved, the sociotechnical factors contributing to risk, and the potential short- and long-term equity implications. Participants will then formulate actionable principles for responsible AI use, such as human-in-the-loop oversight, bias auditing routines, explainability standards, data minimization, and participatory governance mechanisms. The exercise emphasizes pragmatic, context-sensitive decision-making and culminates in shared guidelines that organizations can adopt to align AI practices with EDI commitments.

**Part 4: “Policy Incubator” (20 min)** In this culminating segment, participants will transition from analysis to action by collaboratively developing policy ideas that support equitable and accountable AI use in organizations. Drawing on insights from the earlier segments, groups will identify key challenges—such as insufficient transparency, weak governance structures, inadequate bias monitoring, or limited employee voice—and brainstorm policy responses tailored to HR and EDI contexts. Participants are encouraged to consider multiple levels of intervention, including organizational guidelines, cross-functional governance committees, procurement standards for AI vendors, employee communication protocols, and compliance with emerging regulatory frameworks. Each group briefly “pitches” a proposed policy, highlighting its purpose, stakeholders, implementation steps, and anticipated impact on EDI outcomes. Facilitators will then guide a collective synthesis to identify shared priorities and innovative approaches. The session emphasizes both creativity and feasibility, enabling participants to convert conceptual understanding into actionable governance strategies that organizations can adopt to steward AI responsibly and advance EDI.

**Part 5: Synthesis & Takeaways (10 min)** The closing segment brings the workshop’s insights together through a facilitated synthesis exercise. Participants will collectively identify the most compelling strategies, lessons, and cautionary insights surfaced throughout the session. These contributions are consolidated into a collaboratively generated “**Responsible AI + EDI Toolkit**,” which includes practical guidelines for auditing algorithmic systems, questions HR and EDI teams should ask vendors, recommended fairness and transparency practices, and principles for inclusive governance. Attendees will also articulate key takeaways about the sociotechnical nature of AI-driven inequities and the importance of cross-functional collaboration. The final toolkit is shared with all participants, equipping them with actionable resources to guide responsible AI implementation and strengthen EDI outcomes within their own organizational contexts.

## **Workshop Goals:**

By the end of the session, participants will be able to:

- Explain mechanisms through which algorithms generate or reproduce bias.
- Evaluate the fairness of AI-based HR and management tools.
- Apply frameworks for responsible and transparent AI governance.
- Analyze real organizational cases involving algorithmic discrimination.
- Identify opportunities for policy development in AI and EDI.

## **Intended Audience:**

This PDW is designed for:

- Scholars researching EDI, AI, analytics, HR, or ethics
- Early-career scholars looking for research ideas or collaborators
- Practitioners deploying AI tools
- Doctoral students exploring emerging domains

## **PDW Logistics:**

- **Length:** 1.5 hours
- **Room:** Standard PDW setup with breakout tables
- **Technology needs:** Projector + ability for small-group work (no special software required), participants to bring their own laptops
- **Participant materials:** Case packets, fairness-evaluation worksheet, responsible AI checklist

**Speakers:**

- Sana Ahmed, Lecturer, Henley Business School, University of Reading, U.K. PhD Scholar, Henley Business School, University of Reading, U.K.
- Haffsa Rizwani, Partner and Co-founder, Inclusive Impact, Sweden. PhD Scholar, Henley Business School, University of Reading, U.K.