MADS Ethics portfolio assignment 2 – Casestudy dating app

First impression of the ethical issues

The case shows that Breeze's algorithm likely causes indirect discrimination: users with a darker skin tone or non-Dutch background receive fewer matches. This is problematic, as dating is about personal relationships and equal opportunity is essential.

From a deontological perspective (Stanford Encyclopedia of Philosophy, 2024), it is morally unacceptable to continue using an algorithm that reinforces inequality, even unintentionally. The duty to prevent discrimination takes priority, aligning with the ruling of the Dutch Human Rights Institute: once you know your system discriminates, you must intervene.

From a utilitarian or consequentialist perspective (Stanford Encyclopedia of Philosophy, 2023), adjustment is also desirable: it increases diversity on the platform and ensures more users get a fair chance, thereby improving overall well-being.
Another issue is the lack of transparency and explainability. Breeze knows the general workings of the algorithm but not the details ("black box"), which is concerning when sensitive personal data is involved. Principles of Responsible AI (Mckinsey, n.d.) and ethics by design require monitoring and corrective action, especially when signs of discrimination arise.

Finally, **compliance with regulations** such as the GDPR (Eur-les Europe, 2016) and the upcoming EU AI Act (European Parliament, 2023) is crucial. These frameworks demand careful handling of personal data, regular impact assessments (e.g., IAMA (Rijksoverheid. 2021)), and proof of measures against bias and discrimination.
In short, while the bias may not have been foreseeable, once identified, both a moral and legal duty to act arises. Transparency, fairness, and a duty of care toward users must take priority. Waiting for a lawsuit is ethically untenable.

Directed Acyclic Graph (DAG)

In this step, a DAG is created:
"A directed acyclic graph (DAG) is a type of graph in which nodes are linked by one-way connections that do not form any cycles. DAGs are used to illustrate dependencies and causal relationships" (Gomstyn. A & Jonker. A, 2025).

The purpose of a DAG is to make visible how different elements are connected and to clarify the causal pathways that lead to the ethical issue at hand.

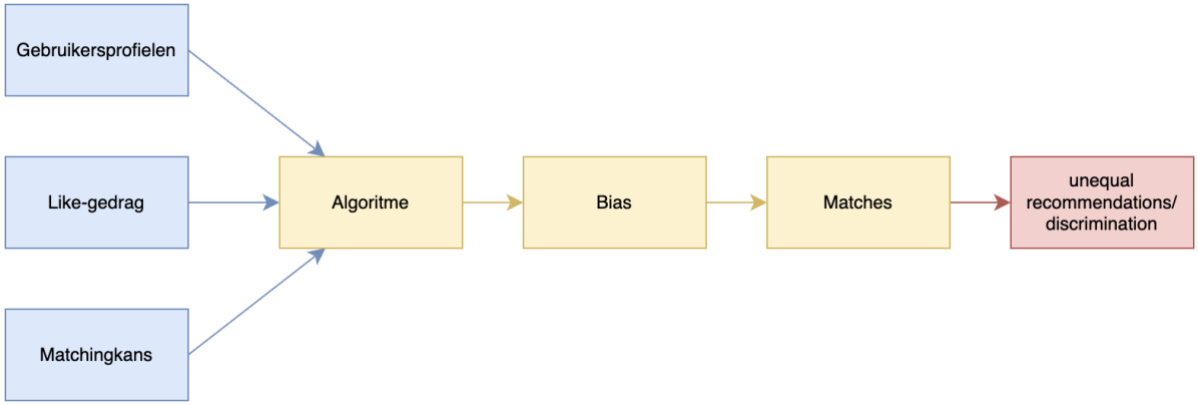

Figure 1. DAG Dating App. (Nick Reinder. 2025)

After this exercise: aspects I initially missed

One aspect I missed in my first impression is Breeze's handling of the situation. Once there were clear signals of potential discrimination, it was ethically irresponsible to let the issue escalate into a legal case. By hiding behind the "black box" nature of the model, the company gave the impression that it was aware of the risks but chose not to act transparently. From an ethical perspective, accountability and corporate responsibility require immediate corrective action and openness once discrimination is suspected, rather than deferring responsibility to legal proceedings.

Recommendation to the data scientist

A data scientist working on such assignments must ensure they fully understand how the model operates, even when parts are considered a "black box." While not every mechanism can be perfectly explained, one cannot hide behind opacity when people's personal data and lives are affected. Especially with sensitive domains such as dating or other social platforms, the ethical stakes are higher.

It is crucial to adopt a responsible AI mindset, which includes:

- conducting risk and impact assessments (e.g., on bias, discrimination, and fairness),
- applying transparency and explainability measures wherever possible,
- and ensuring compliance with privacy and non-discrimination regulations.

Above all, the data scientist has a duty of care to anticipate potential harms, communicate risks openly, and intervene when unintended negative effects emerge. Ethical awareness, accountability, and proactive monitoring must be integral to the development process.

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