This OER comprises a poster and an evidence brief on the AI gender data gap — definition, causes, documented cases, and recommended interventions.

GEDIS

Mind the Gap: Gender Data and AI Bias

The gender data gap = missing/uneven data about women. As a result, AI decisions skew male through representative, algorithmic, cultural, and intersectional biases.

WHY IT HAPPENS

- Most AI teams are men; design choices reflect their blind spots.
- Training data under-represent women.
- Optimising only for overall accuracy or profit can sideline minorities.
- Women's phone/internet access is lower → fewer data traces.
- Binary labels and averages hides subgroups.

CASES BY BIAS TYPE

Representative

- Face recognition: 35% errors for darker-skinned women (0.8% lighter-skinned men).
- DALL·E 2 job images: women 38% (men 62%); women smiling 2.2× more.
- STEM visuals: 75–100% men.

Algorithmic

- Hiring AI: male-skewed training → women's CVs down-ranked.
- Credit scoring: women fewer/smaller loans despite better repayment.
- Health AI: misses women's symptoms → delayed diagnosis.
- Music recommenders: up to +6. 3 pp more accurate for men.

Cultural

- Default female assistants → "women-as-helpers" stereotype.
- Llama-2 stories: women in domestic roles ~4× more; men get higher-status jobs.

Intersectional

- YouTube captions: more errors for women.
- STEM job ads: men ~+20% impressions.
- Book recommenders: less exposure for women authors

CLOSING THE GAP: WHAT TO DO

Representative bias

- Inclusive datasets; document & publish coverage; intersectional benchmarks.

Algorithmic bias

- Remove gender markers from inputs; adjust decision thresholds to balance errors; debias in training and post-processing; continuous monitoring.

Cultural bias

- Neutral/non-binary default voices; design checks for stereotypes; diverse teams in design and testing.

Intersectional bias

- Publish subgroup metrics (gender, skin tone, age, dialect); pre/post-deployment audits; classify HR/finance as high-risk; gender impact statements; transparency standards.

Target audiences: 📚 Librarians, 👩‍🏫 Professors, 🧑‍🎓 Students

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GEDIS project context

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GEDIS - Gender Diversity in Information Science: Challenges in Higher Education. https://ub.edu/gedis

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