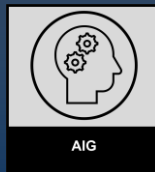




STOP!

Why AI Detectors are Detrimental

The Risks of AI Detectors in Academia: A Faculty Discussion





Focus of Today's Session

01

How AI Detectors
Work

02

The Impact of AI
Detectors on
Students

03

Ethical and Legal
Considerations

04

Transparency as a
Foundation

05

Exploring
Alternatives to AI
Detection

06

Group Discussion



How AI Detectors Work

Algorithms and Pattern Recognition

- Use machine learning algorithms trained on vast datasets.
- Text follows predictable patterns
- Formal, structured language.

1

3

Detection Methods

- Probability score
- Statistical properties

Training Data

- Human-written text including academic papers, books, articles.
- AI-generated text from outputs generated by AI systems.

2

4

Limitations

- False positives/negatives
- Difficulty detecting modified text.
- Educated guesses

AI Detector Misconceptions



AI Detectors

Probability Not Certainty

- Likelihood score
- No concrete evidence

False Positives

- Complexity of human writing
- AI-generated text modifications

No Direct Plagiarism Detection

- AI detectors vs. Plagiarism tools
- Unfair accusations

Context of Use Matters

- Supporting evidence needed
- Best used as advisory tools



Bias in Detection Algorithms

Training Data Limitations



- Bias in the datasets

Language Biases



- ESL writers
- Cultural differences

Cultural Biases



- Western-centric
- Underrepresents certain cultural or linguistic groups.



Algorithmic Bias

- Perpetuate biases
- Lack of adaptation

Overgeneralization



- One-size-fits all approach

Academic, Emotional and Creative Impact on Students



Academic Integrity vs. Punitive Practices

- False positives
- Damage to student-teacher relationships
- Misjudging ESL and Neurodiverse students
- Over-reliance on AI detectors
- Academic and emotional toll
- Deters innovation and personal expression



Consequences of False Positives

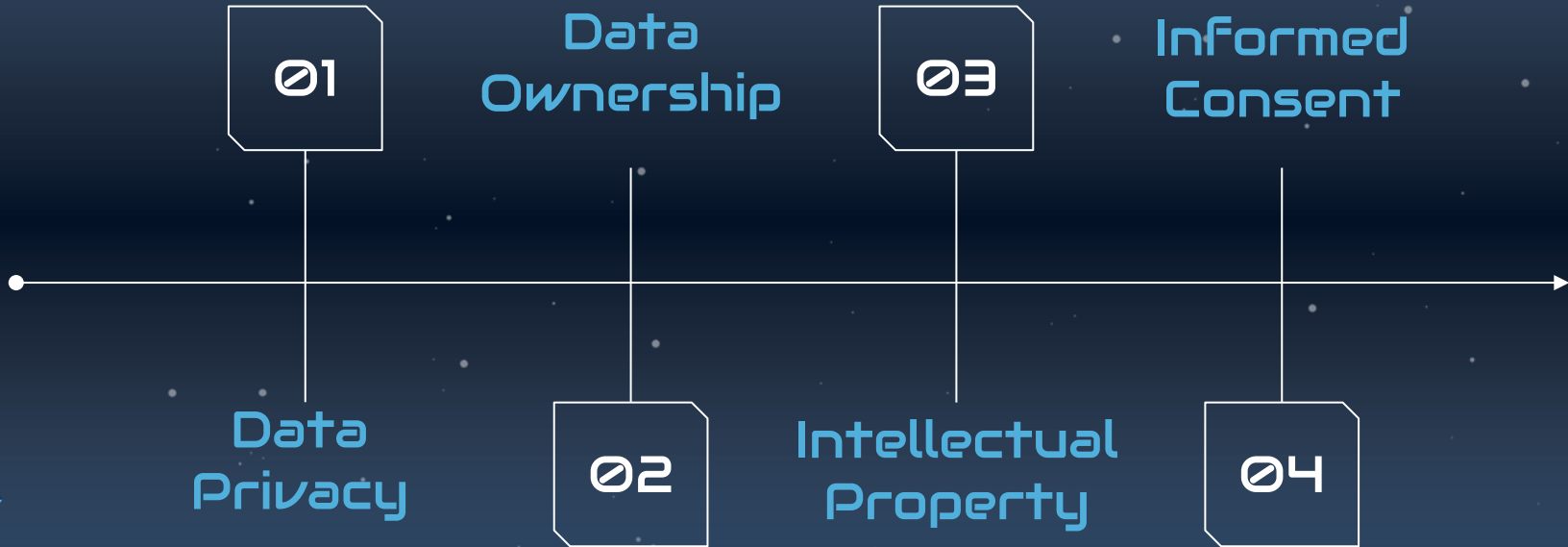
- Stress and anxiety
- Erosion of confidence
- Feeling of unfairness
- Fear of future accusations
- Damage to academic record
- Lowered academic performance
- Erosion of trust
- Many more...



Effect on Innovation and Creativity

- Over simplification of writing
- Stifling of original thought and creativity.

Ethical and Legal Considerations



Transparency as a Foundation



Define Acceptable Use & Academic Integrity

- Provide clear guidance on when/how AI can be used
- Emphasize the importance of honesty in AI use as part of academic integrity.



Encourage Disclosure & Provide Disclosure Options

- Normalize the disclosure of AI usage to maintain trust and integrity.
- Integrate simple ways for students to indicate AI use without stigma.



Discuss AI's Place in Learning & Career Readiness

- Encourage students to view AI as a supplemental tool, not a replacement.
 - Emphasize responsible AI use as a valuable skill for professional environments.





**Identifying
AI-
Generated
Work**

Ask to see their Grammarly version history

Writing style inconsistencies

Too perfect or too generic

Overly complex or overly simple language

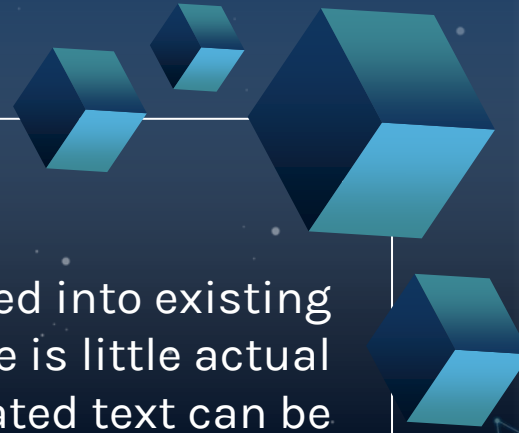
Off-topic content

Reference inaccuracies or invention

Heavily formulaic text and unusual formatting

Quiz the Student on the Content of Their Work





“...whether AI detection is a new feature embedded into existing product lines or a standalone product, there is little actual scientific evidence to show that AI-generated text can be effectively detected (see Sadasivan et al., 2023). In a TechCrunch article, Open AI, the company that developed ChatGPT, talked about its own detection tool, noting that its success rate was around 26%.”



Eaton, S.E. (2023, May 6). The Use of AI-Detection Tools in the Assessment of Student Work. *Learning, Teaching, and Leadership*.
<https://drsaraheaton.com/2023/05/06/the-use-of-ai-detection-tools-in-theassessment-of-student-work/>



Thanks!

Do you have any questions?

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