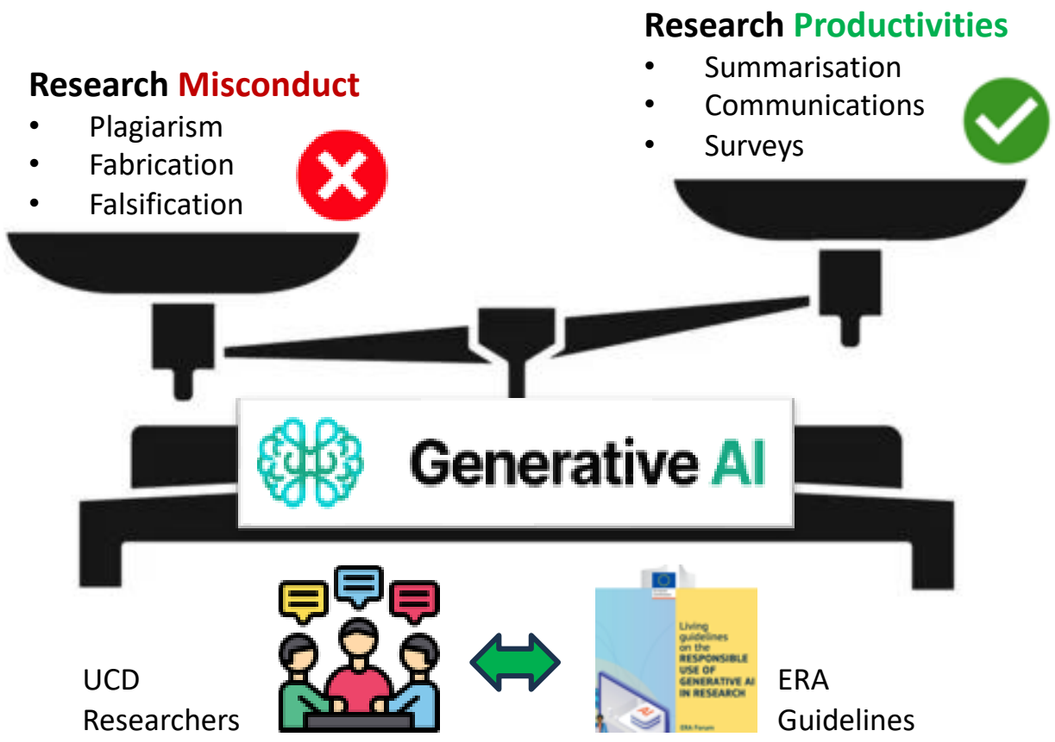
Responsible Use of GenAI for Research Activities: Insights from UCD

Shen Wang[1], Adrian Byrne[2] and Jiaying Guo[1]
[1] School of Computer Science; [2] CeADAR Centre

Motivation



- Generative AI (GenAI) tools such as ChatGPT are **increasingly integrated** into research workflows.
- Significant **enhancements in productivity** through tasks like literature summarisation, data analysis, and even code generation.
- The improper use of GenAI tools raises pressing concerns about research ethics and potential **misconduct.**
- The European Research Area (ERA) Forum released the "*Living Guidelines on the Responsible Use of Generative AI in Research*" in March 2024 (updated April 2025).
- Our ReCLAIM R1 funded project aims at **promoting these guidelines** while **collecting feedback and use cases** from UCD researchers.

Workshop Procedure

The procedure of all workshops is as follows:

- **Pre-workshop (3~4 weeks)**: Circulate a survey collecting general opinions on the use of GenAI for the targeted audience.
- **Workshop Agenda:**
  - 10 mins: intro to survey results
  - 5 mins: intro to research integrity principles
  - 25 mins: group discussions: comments on the *survey results*
  - 10 mins: intro to the ERA guidelines
  - 25 mins: group discussions: comments on the *guidelines*
  - 5 mins: summary
- **Post-workshop (~2 weeks):** news published on CS website with workshop highlights

Workshop Highlights

Audience

- 1st workshop: September 2024, researchers from the School of Computer Science (**CS**), mainly PhD students and their supervisors;
- 2nd workshop: November 2024, researchers from **CeADAR**, mainly Principal Investigators, Data Scientists and Software Engineers.
- 3rd workshop, May 2025, researchers from **UCD**, including STEM and AHSS, mainly PhDs, Postdocs, and their supervisors.

Shared Findings

- More than half of the researchers think using GenAI benefits their daily work.
- ChatGPT dominates over all other GenAI tools for researchers.
- Majority of researchers have not participated in any training in using GenAI either ethically or efficiently.
- Text summarisation and rewriting for communications are the most popular use cases among researchers.

Different Observations

- The number of researchers who hesitate to use GenAI due to research integrity concerns: UCD 37.8% > CS 19.4% > CeADAR 9.1%.
- Focuses on open discussions: CS: peer review use case; CeADAR: data privacy and IP; UCD: extra time incurred for checking GenAI outputs.
- Confidence in understanding and following ERA guidelines: CS > CeADAR > UCD

ERA Guidelines

1. Follow key principles of research integrity, use GenAI transparently and remain ultimately responsible for scientific output.
2. **Use GenAI preserving privacy, confidentiality, and intellectual property rights on both, inputs and outputs.**
3. Maintain a critical approach to using GenAI and continuously learn how to use it responsibly to gain and maintain AI literacy.
4. **Refrain from using GenAI tools in sensitive activities e.g. peer reviews or evaluations.**

	G1	G2	G3	G4
CS	3.42	**3.13**	3.84	**4.06**
CeADAR	3.33	**3.00**	3.42	**3.67**
UCD	3.00	**2.97**	3.35	**3.41**

Table 1. The average confidence score in understanding and following each guideline over all participants. (5: highest, 1: lowest)

Future Work

- Short video lectures: introducing research integrity principles, ERA guidelines, and use cases from various disciplines and sectors.
- Whitepaper: summarising key findings and giving more concrete suggestions under each guideline.

{**shen.wang**, adrian.byrne, jiaying.guo}@ucd.ie

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