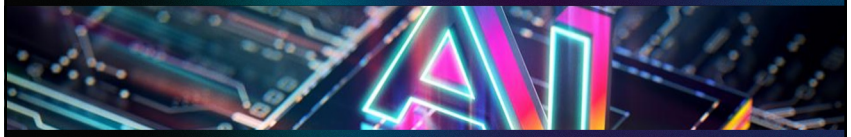
Integrating AI in Research Activity



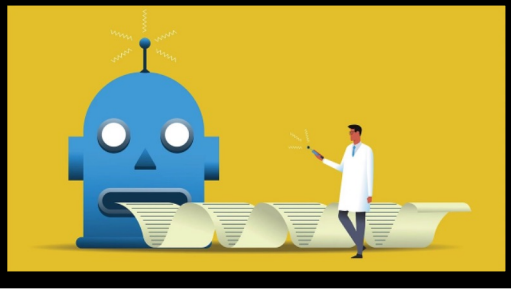
01.09.25
ILA AI & Leadership Virtual Summit

Speakers: Eric Kaufman, Elizabeth Goryunova, & Tashieka Burris-Melville

2

Researchers built an 'AI Scientist' — what can it do?

(Castelvecchi, 2024)

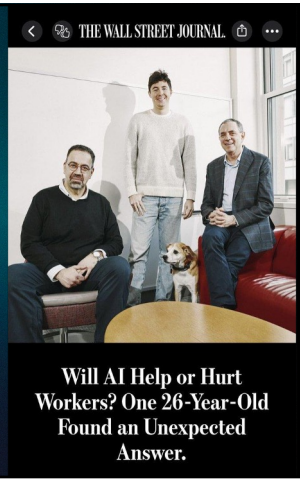


3

ILA 2025 AI & Leadership Virtual Summit

New research shows AI made some workers more productive—but less happy.

"Researchers who were already the most successful … were even more successful with the AI tool, while other scientists didn't benefit as much."



4

ILA 2025 AI & Leadership Virtual Summit

Experiences
Challenges
Opportunities
Recommendations

- Eric Kaufman, Virginia Tech
- Elizabeth Goryunova, University of Southern Maine
- Tashieka Burris-Melville, University of Technology, Jamaica

5

ILA 2025 AI & Leadership Virtual Summit

Integrating AI in Research Activity

Experiences

Original Research
Collaborative Research
Guiding Students in Research

6

THE CHRONICLE OF HIGHER EDUCATION

Scholars Are Supposed to Say When They Use AI. Do They?

Journals have policies about disclosing ChatGPT writing. Enforcing them is another matter.

By Stephanie M. Lee
December 18, 2024

7

ILA 2025 AI & Leadership Virtual Summit

Integrating AI in Research Activity

Challenges

Appropriateness
Inaccuracies
Context
Privacy/Security/Ethics
Cost
Bias

8

INSIDE HIGHER ED

Can We Trust AI in Qualitative Research?

(Gillen, 2024)

Reasons for Concern:

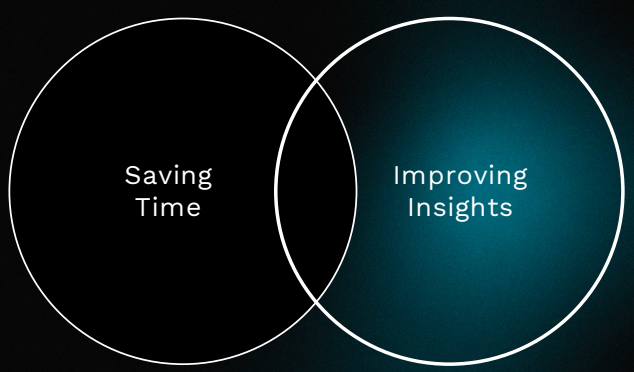
1) The researcher is just as important as the research.
2) AI is not neutral.
3) Adoption of AI tools can have a negative impact on the training of new researchers.
4) Unlike a human researcher, AI can't safeguard our data.

https://www.insidehighered.com/opinion/views/2024/10/09/can-we-trust-ai-qualitative-research-opinion

9

ILA 2025 AI & Leadership Virtual Summit

Integrating AI in Research



10

ILA 2025 AI & Leadership Virtual Summit

Integrating AI in Research Activity

Opportunities

Efficiency
Scalability
Natural Language Processing
Interdisciplinarity

11

ILA 2025 AI & Leadership Virtual Summit

How might AI tools help you find what you are looking for more quickly?

https://scholar.googleblog.com/2024/11/ai-outlines-in-scholar-pdf-reader-skim.html

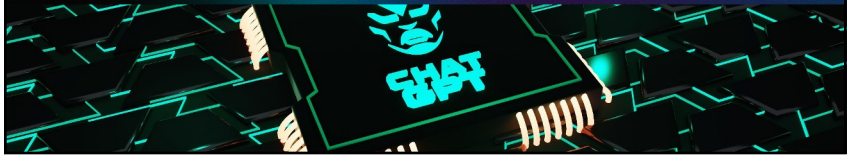
12

ILA 2025 AI & Leadership Virtual Summit

Integrating AI in Research Activity

Recommendations

When to engage: design, implementation, analysis
What to engage: tools that fit research purpose
How to engage: augment rather than replace
critically assess



13

ILA 2025 AI & Leadership Virtual Summit

Integrating AI in Research Activity

WHY? SOCIAL SCIENCE

Because It Can Contribute to AI that Benefits Society
(Arthur & Robinson, 2024)

"Now is the perfect time for the thoughtful and extensive integration of social science evidence and expertise into AI development, deployment, implementation, and use so that AI can be optimally, positively effective while minimizing risks of harm to society."

14

THANK YOU

Q & A

Further inquiries:
Eric Kaufman, ekaufman@vt.edu
Elizabeth Goryunova, elizabeth.goryunova@maine.edu
Tashieka Burris-Melville,
Tashieka.Burris@utech.edu.jm

01.09.25
ILA AI & Leadership Virtual Summit

Speakers: Eric Kaufman, Elizabeth Goryunova, & Tashieka Burris-Melville

15

References

Arthur, C., & Robinson, E. (2024, March 29). Because it can contribute to AI that benefits society. *Why Social Science?* https://www.whysocialscience.com/blog/2024/3/29/because-it-can-contribute-to-ai-that-benefits-society

Castelvecchi, D. (2024). Researchers built an 'AI Scientist'—what can it do?. *Nature*, *633*(8029), 266-266. https://www.nature.com/articles/d41586-024-02842-3

Gillen, A. L. (2024, October 9). Can We Trust AI in Qualitative Research? *Inside Higher Ed*. https://www.insidehighered.com/opinion/views/2024/10/09/can-we-trust-ai-qualitative-research-opinion

Glynn, A. (2024). Suspected Undeclared Use of Artificial Intelligence in the Academic Literature: An Analysis of the Academ-AI Dataset. arXiv preprint arXiv:2411.15218. https://doi.org/10.48550/arXiv.2411.15218

Lahart, J. (2024, December 29). Will AI help or hurt workers? One 26-year-old found an unexpected answer. *The Wall Street Journal*. https://www.wsj.com/economy/will-ai-help-hurt-workers-income-productivity-5928a389

Lee, S. M. (2024, December 18). Scholars are supposed to say when they use AI. Do they? *The Chronicle of Higher Education*. https://www.chronicle.com/article/scholars-are-supposed-to-say-when-they-use-ai-do-they

Shetty, N., Sethi, A., Yuan, S., Chang, J., Wang, H., & Verstak, A. (2024, November 3). AI outlines in Scholar PDF Reader: skim per-section bullets, deep read what you need. *Google Scholar Blog*. https://scholar.googleblog.com/2024/11/ai-outlines-in-scholar-pdf-reader-skim.html

Virginia Tech Office of Research and Innovation. (2024, February 20). *Guidance: Using artificial intelligence during research activities.* Virginia Tech. https://www.research.vt.edu/research-support/forms-guidance/sirc/guidance-using-artificial-intelligence-during-research-activities.html

16