



IHMM Artificial Intelligence Policy

The Institute of Hazardous Materials Management [IHMM] proposes to engage in a pilot project to determine if the use of artificial intelligence [AI] could prove useful in assisting scheme committee subject matter experts [SMEs] with writing questions for IHMM examinations. This policy is designed to provide guidance and guard rails to the scheme committees, subject matter experts, and staff in their use and tracking of the use of AI in the pilot project.

1. Currently, SMEs serving on scheme committees write the questions for IHMM examinations. This process can take several months or years to complete.
2. In conducting a pilot study using AI to assist in item [exam questions] writing, it is our goal to determine if [a] AI is useful for this purpose, and [b] whether using AI for this purpose shortens the time it takes to complete the tasks involved in item writing.
3. Conducting the pilot study requires the continued participation of SMEs to ensure that the product of AI is correct and suitable for use in item writing.
4. The overriding concern of IHMM is our protection of IHMM against potential litigation arising from its use of AI, as well as our protection of the accredited status of IHMM's credentials whose underlying foundation encompasses the use of AI.

Defined - AI

The theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

Background

1. On September 5, 2023, the United States Patent and Trademark Office [USPTO] issued a notice of inquiry on copyright and artificial intelligence. The U.S. Copyright Office recently [issued a notice of inquiry](#) (NOI) in the Federal Register on copyright and artificial intelligence (AI). The Office is undertaking a study of the copyright law and policy issues raised by generative AI and is assessing whether legislative or regulatory steps are warranted. The Office will use the record it assembles to advise Congress; inform its regulatory work; and offer information and resources to the public, courts, and other government entities considering these issues. This NOI and associated actions by the

USPTO raise serious issues concerning the ability of the U.S. government agency responsible for copyrighted works to properly protect the intellectual property of those using AI. This action, while welcome, reflects the evolving nature of the regulatory and legal environment in which AI operates in a high degree of uncertainty.

- a. <https://www.federalregister.gov/documents/2023/02/14/2023-03066/request-for-comments-regarding-artificial-intelligence-and-inventorship>
- b. <https://www.uspto.gov/subscription-center/2023/copyright-office-issues-notice-inquiry-copyright-and-artificial#:~:text=The%20U.S.%20Copyright%20Office%20recently,or%20regulatory%20steps%20are%20warranted.>

2. The use of AI has generated considerable attention in the legal community, resulting in litigation involving AI. For example, [*Andersen et al. v. Stability AI Ltd.*](#), where plaintiffs brought claims of direct copyright infringement, vicarious copyright infringement, and removal of copyright management information. [*Kadrey v. Meta Platforms*](#), plaintiffs' theory regarding the model being a derivative work is slightly different from the *Andersen* case (although it was filed by the same lawyers). Rather than argue that the LLaMA models contain compressed copies of the training data, the defendants claim that these models are infringing derivative works because the models cannot function without the "expressive information" extracted from the plaintiff's books. [*Thomson Reuters Enterprise Centre GmbH v. ROSS Intelligence Inc.*](#), While recent copyright cases related to generative AI have attracted a great deal of attention, these are not the first copyright cases involving the unlicensed use of materials to train AI models. [*Thomson Reuters Enterprise Centre GmbH v. ROSS Intelligence Inc.*](#), which was filed in the U.S. District Court for the District of Delaware in May 2020, centers on allegations that copyrighted headnotes from Thomson's Westlaw legal research database were used as training data for an AI legal research tool that ROSS Intelligence developed. [*The New York Times is suing OpenAI and Microsoft*](#) for copyright infringement. The case, filed December 2023, alleges that millions of *New York Times* articles were used to train and develop OpenAI's chatbot and other technology, which now competes with the news organization as a source of reliable information. The case also alleges that OpenAI's language models mimic the *Time's* style and recites its content verbatim.

IHMM's additional concern is with the potential for litigation involving the resources drawn upon for our use of AI, and parties in the future asserting claims against IHMM for its use of the material AI generates. As the federal regulators aren't sure of how to grant copyright for AI-generated material, as states and federal legislative bodies have started attempts to create new bodies of law concerning AI, and as litigation is arising from the uses of AI in commerce, there is considerable concern of IHMM's use of AI.

- a. <https://www.perkinscoie.com/en/news-insights/recent-rulings-in-ai-copyright-lawsuits-shed-some-light-but-leave-many-questions.html>

IHMM Policy

I. Scope

This policy applies to all AI applications, systems, and tools employed within IHMM for credentialing, including machine learning models, algorithms, and AI-powered assessment tools.

II. Principles

Ethical Use: AI will be employed ethically, respecting the rights, privacy, and dignity of all examination candidates and stakeholders.

Transparency: AI processes and decisions will be transparent, with mechanisms in place for explainability and interpretability. IHMM exam questions are accompanied by the source material from which the question was derived. Given the potential for litigation, IHMM needs to protect itself by ensuring that the AI technology not only generates a question but also its source.

Fairness: AI will be designed and implemented to mitigate biases, ensuring fairness and equal treatment for all candidates.

Security: Robust security protocols will be in place to ensure data integrity, confidentiality, and protection against unauthorized access.

Accountability: Clear mechanisms for accountability will be established to address AI decisions and outcomes.

III. Guidelines

Integration with Subject Matter Experts (SMEs):

- AI will serve as a tool to assist SMEs in developing and reviewing examination content. AI will be used for no other purpose.
- SMEs will have the final authority to approve AI-generated content to ensure quality, relevance, and alignment with credentialing standards.

Data Privacy:

- AI will adhere to stringent data privacy standards, complying with applicable legal and regulatory requirements and the IHMM Privacy and Data Security Policy > <https://ihmm.org/ihmm-privacy-and-data-security-policy/>
- Measures will be in place to ensure the anonymity and confidentiality of candidates' data.

Bias Mitigation:

- AI models will be rigorously tested and refined to identify and mitigate biases.
- Training data will be diverse and representative to ensure fairness and inclusivity.

Transparency and Explainability:

- AI methodologies and algorithms will be documented and subject to review by the AI Oversight Committee.
- Decisions influenced by AI will be explainable and justifiable.
- Each document where AI is used shall include the statement, “ ***Some of this material was generated by artificial intelligence and then subsequently reviewed and validated by the subject matter experts from the [name of IHMM group].*** ”

Security Protocols:

- AI systems will be safeguarded against unauthorized access, data breaches, and cyber threats.
- Regular security audits will be conducted to identify and mitigate potential vulnerabilities.

Intellectual Property:

- All agreements between IHMM and external AI vendors providing AI tools for this policy must consider the outputs of AI as IHMM trade secrets and property.
 - a) Trade Secret means technical and non-technical information, in tangible or intangible form, including data, ideas, concepts, formulae, compilations, methods, techniques, processes, financial and business plans and business methods (and all derivatives of the foregoing) disclosed by IHMM to the AI vendor[s].
 - b) The AI vendor and its subsidiaries have taken reasonable and customary actions to protect IHMM's rights in and prevent the unauthorized use and disclosure of material trade secrets and confidential business information (including

confidential source code, ideas, research and development information, know-how, formulas, compositions, technical data, designs, drawings, specifications, research records, records of inventions, test information, financial, marketing and business data, customer and supplier lists and information, pricing and cost information, business and marketing plans and proposals) owned by IHMM, and, to the knowledge of the AI vendor[s], there has been no unauthorized use or disclosure.

Continuous Improvement:

- AI applications will be continuously monitored and enhanced to improve accuracy, fairness, and efficiency.
- Feedback from SMEs, candidates, and other stakeholders will be integral to the ongoing refinement of AI applications.

Recordkeeping:

- This policy guides the use of AI by scheme committees as a tool to assist with item writing. As such, accurate and complete records of the experience with AI are critical to be able to evaluate whether the use of AI has met the objectives set out at the beginning of this policy document.

IV. AI Oversight Committee

IHMM will establish an AI Oversight Committee comprising AI experts, SMEs, ethicists, and legal advisors to oversee the ethical and responsible use of AI in credentialing. The committee will ensure adherence to this policy, ethical norms, accreditation standards, and legal requirements. Recommend the same group who raised this topic in August 2023 strategic planning.

V. Amendments

This policy will be reviewed and amended as necessary to align with technological advancements, legal changes, and SME feedback, ensuring the ongoing integrity, fairness, and quality of AI-enhanced credentialing processes.

Finally

This AI Use Policy establishes the ethical and responsible use of Artificial Intelligence in the development, administration, and enhancement of credentialing examinations at IHMM.

We are committed to ensuring AI is employed in a manner that upholds the integrity, fairness, and quality of our credentialing processes while respecting the rights and privacy of all candidates.