



ASHRAE Policy for Use of Artificial Intelligence (AI)

Board of Directors Approved February 9, 2025

Purpose:

The purpose of this Artificial Intelligence (AI) policy is to guide the ethical and effective use of AI technologies to serve ASHRAE members. As a publisher of technical guidelines and standards, organizer of conferences, provider of educational programs, and a research institution, ASHRAE strives to ensure that AI is used in ways that align with our mission, upholds intellectual property rights, and promotes fairness, transparency, and accountability.

Scope:

This policy applies to all employees, contractors, volunteers, and third-party partners involved in the development, use, or management of AI tools and technologies related to ASHRAE programs including publications, conferences, educational programs, and technical research.

1. Use Cases

AI is a powerful tool that can enhance ASHRAE's ability to create, share, and disseminate technical knowledge. However, it is crucial to ensure that AI is applied responsibly and within the scope of the following permissible use cases:

- **Research:** AI can be used for analyzing large datasets, identifying trends, and assisting in technical research. Outputs from AI systems should always be reviewed by ASHRAE experts for validity, accuracy, and relevance.
- **Content Editing:** AI can assist in editing content, such as improving grammar, suggesting alternative phrasing, or refining technical language. AI should **not** be used to independently generate technical guidelines, standards, or official publications.

- **Idea Generation:** AI can be used to generate ideas for new projects, innovations, or educational content. However, these ideas should always undergo human validation before implementation.
 - **Educational Programs:** AI can be integrated into educational tools, such as chatbots for interactive learning, personalized course recommendations, or automatic grading. The use of AI should aim to support, not replace, human interaction in educational contexts.
 - **Conference Management:** AI tools may be used to assist in tasks such as scheduling, organizing speaker sessions, or matching attendees with relevant content. AI tools used in the management of conferences must respect privacy and data security standards.
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2. Understanding AI

Artificial Intelligence (AI) refers to the simulation of human intelligence processes by computers. These processes include learning (acquiring knowledge and rules for using it), reasoning (using the rules to reach conclusions), and self-correction. Machine Learning (ML), a subset of AI, involves the development of algorithms that allow systems to learn from and make predictions based on data. AI can support decision-making, automate repetitive tasks, and analyze vast amounts of data at speeds beyond human capability.

3. Definitions

- **Artificial Intelligence (AI):** A branch of computer science that focuses on creating systems capable of performing tasks that normally require human intelligence.
 - **Machine Learning (ML):** A technique in AI where algorithms are trained to recognize patterns in data and make predictions or decisions based on that data.
 - **Natural Language Processing (NLP):** A subfield of AI focused on enabling machines to understand and interpret human language, such as text and speech.
 - **Bias:** A systematic error in AI predictions or outputs due to biased data or flawed algorithms, often leading to unfair or discriminatory outcomes.
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4. Recording Tools

To protect privacy and confidentiality and to protect ASHRAE and its members legally, the use of recording bots or AI-based transcription tools during conferences, webinars, or meetings is prohibited unless explicitly authorized. All recorded data must comply with privacy laws and be reviewed by a human for compliance.

5. Intellectual Property Rights and Risk Management

AI tools must be used in a way that protects the intellectual property (IP) of our organization and its stakeholders. This includes:

- **Respecting Copyright:** AI tools must not be used to infringe upon existing copyrights, whether by reproducing content verbatim or creating derivative works without appropriate permission. AI tools cannot be used to generate original content that is not validated
 - **Data Security:** AI systems must handle sensitive data, including proprietary research, member information, and conference content, securely. AI tools should not be used to extract, process, or store proprietary data without ensuring compliance with data protection regulations.
 - **Third-Party Content:** When using AI tools to generate or analyze content, users must ensure that they respect the ownership rights of third-party creators and sources.
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6. Bias and Fairness in AI

AI systems can unintentionally perpetuate or exacerbate bias due to biased training data or flawed algorithmic design. To ensure fairness and accuracy:

- **Human Oversight:** All AI-generated content, reports, or recommendations must be reviewed by a qualified human before being used in official documents, presentations, or public releases.
- **Bias Detection and Mitigation:** AI systems used at ASHRAE must be regularly assessed for bias, particularly when they affect decisions in research, education, or event management. We will prioritize the use of tools that promote fairness and transparency.

- **Inclusive Development:** Efforts will be made to ensure that AI development and implementation consider the diversity of the populations we serve, including underrepresented groups.
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7. Guidelines for AI Use in Content Creation

- **Technical Documents:** AI **cannot** be used to independently draft or finalize official technical guidelines, standards, or research papers published by ASHRAE. AI may be used to assist in research, gather preliminary information, or propose content structures, but all final content must be reviewed, validated, and approved by subject matter experts.
 - **Research:** AI tools can assist in data analysis, hypothesis generation, and literature reviews. However, all AI-assisted findings must undergo rigorous human validation to ensure they meet the standards of scientific integrity and accuracy.
 - **Idea Generation:** AI can support brainstorming and idea generation for new research initiatives or educational program development. However, human experts must critically assess these ideas before they are pursued or shared publicly.
 - **Human Validation:** For all content generated by AI, human review is essential to ensure the information is relevant, accurate, and aligned with our organizational values and standards.
 - **Meetings:** ASHRAE meetings at the Society, Regional or Chapter level should not be recorded using any means, including AI tools. AV Recordings of instructors or lecturers are allowed with permission as long as the recording does not take place at a meeting.
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8. Prohibited Uses

- **Sensitive Documents:** AI tools must not be used to process, analyze, or read documents containing sensitive or proprietary information that is not intended for public dissemination, unless specifically authorized. This includes technical research documents, internal communications, and unpublished works.
- **Deceptive Content:** AI should not be used to generate misleading or deceptive content, including content that misrepresents research findings or misleads the public or our stakeholders.

9. Transparency and Accountability

We commit to being transparent about our use of AI technologies. Any AI systems used by ASHRAE and its volunteers must:

- **Provide Clear Disclosure:** Stakeholders, including conference participants, students, and research collaborators, should be informed when AI is used in processes that affect them (e.g., data analysis, content generation, automated feedback).
- **Accountability Mechanisms:** We will establish mechanisms to monitor and evaluate AI systems to ensure they are used in compliance with ethical standards, organizational policies, and applicable laws.

10. Compliance and Review

All volunteers, staff, contractors, and partners using AI tools must comply with this policy. Non-compliance with the AI policy may result in corrective actions or termination of contracts.

This policy will be reviewed and updated annually to reflect changes in technology, regulatory requirements, and best practices in AI use.

Conclusion

The responsible use of AI is integral to advancing ASHRAE's mission and vision. Through this AI policy, we aim to enhance the quality of our publications, research, educational offerings, and conferences while maintaining ethical standards and safeguarding the trust of our stakeholders.