



Virginia Tech's Responsible and Ethical AI Principles

University AI Working Group

Introduction

- Virginia Tech's commitment to advancing knowledge and improving the human condition
- Emergence and impact of AI technologies
- Human-centered approach guided by Principles of Community
- Balance of innovation and responsibility



What do we mean by AI?

- Artificial Intelligence (AI):
 - Artificial intelligence (AI) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.
 - <https://www.britannica.com/technology/artificial-intelligence>
- Generative AI:
 - Generative AI refers to AI systems and algorithms capable of producing original content, such as text, images, audio, video, code, or other data types, in response to user prompts or requests. These systems learn patterns from vast amounts of training data and use this knowledge to generate new, contextually relevant outputs.
 - https://en.wikipedia.org/wiki/Generative_artificial_intelligence

Principles



Uphold our Mission and Principles of Community



Foster Innovation, Discovery, and Exploration



Expand Human Capabilities and Affirm Beneficence



Promote Responsible and Ethical Use



Prioritize Fairness and Transparency



Preserve Human Judgment and Accountability



Secure and Protect Data and Privacy

Uphold our Mission and Principles of Community

The use of AI must support Virginia Tech's core missions and align with our Principles of Community, enhancing learning, fostering discovery, promoting engagement, improving the human condition, advancing knowledge, and mitigating potential harms.

AI serves our purpose.

[Mission](#)

[Principles of
Community](#)

Foster Innovation, Discovery, and Exploration

We will foster a culture of continuous learning and improvement and embrace working with innovative technologies to create transformative opportunities for our students and employees.

We acknowledge that the inherent complexity and rapidly evolving nature of AI technologies will necessitate an approach in which we continually question, analyze, and evaluate AI solutions for robustness, suitability and benefits that outweigh risks.

We use AI to explore and evolve.

Expand Human Capabilities and Affirm Beneficence

AI serves us best when its purpose is clear and its tools are well-matched to complement or enhance outcomes - whether by informing decisions, strengthening results, or improving efficiency - while working in concert with human expertise.

We commit to leveraging AI technologies in ways that amplify and enhance human intelligence, creativity, and decision-making capabilities.

Further, we commit to considering the psychological and social impacts of AI integration across university functions.

We augment and benefit using AI.

Promote Responsible and Ethical Use

We will promote understanding and discourse regarding the responsible and ethical use of AI.

We will closely monitor and consider the implications and impact of the intersection of AI and **intellectual property**.

When choosing to use AI systems, we will consider quality, sustainability, and **environmental impact**.

Further, we will consider the findability, accessibility, interoperability and optimization of reuse of AI digital assets.

We consider the consequences of AI use.

Prioritize Fairness and Transparency

Transparency regarding AI usage is essential to maintain public trust.

We must promote attribution and transparency regarding data collection practices and AI use in decision-making.

We will strive for continuous improvement in inclusivity and equality of opportunity, treatment and impact, considering fairness in all aspects of AI use.

We acknowledge that there are several potential sources of bias in AI and that our responsibility to educate ourselves about and respond to bias extends to our interactions with AI.

We will prioritize explainable AI solutions that clearly outline how specific results are produced and why, allowing users to understand the reasoning behind the outputs, anticipate expected impacts, and identify potential biases.

We show our work.

Human judgment and accountability must be preserved, with AI informing rather than replacing decision-making. Individuals using AI systems are responsible for adhering to existing university policies, standards, and the security review processes. Virginia Tech intends to support an AI-informed workforce and student population and, where feasible, will provide AI-related upskilling, reskilling and educational opportunities.

Preserve Human Judgment and Accountability

Humans decide.

Secure and Protect Data and Privacy

We will prioritize the safety, security, privacy and protection of our community, valuing the unique benefits that human interactions bring to university processes.

We recognize that people are ultimately responsible for decisions, especially in situations that directly impact others.

Further, we commit to safeguarding individual privacy rights as well as proprietary university data by understanding what data is being used by AI solutions and who can access it.

We must protect data from disclosure and, where appropriate, obtain consent from individuals who interact with AI.

We protect personal data when using AI.

Context-Specific Concerns



Teaching and Learning Considerations

Pedagogical integration
Academic integrity
Student support mechanisms
Faculty resources and guidelines



Research Considerations

Research integrity
Data management
Collaboration guidelines
Attribution standards



Administrative Considerations

Operational implementation
Decision support frameworks
Process guidelines
Service enhancement

Supporting Framework

Education and Training

- Community awareness programs
- Responsible usage practices
- Risk awareness and mitigation opportunities
- Regular workshops and seminars

Resources

- University Libraries
- Center for Excellence in Teaching and Learning (CETL)
- Technology-enhanced Learning and Online Strategies (TLOS)
- Division of Information Technology (DoIT)



Conclusion

- Commitment to ethical AI advancement
- Continuous improvement approach
- Leadership in responsible AI use
- Impact on Virginia Tech community and beyond

Thoughts?

Is this going in the
right direction?

Anything you'd
change?

