## Al Use Policy

## Alabama Science and Engineering Fair



Dear Students and Teachers,

We are excited you are embarking on your Science and Engineering Fair (SEF) journey! We wanted to supply you with a set of guidelines for how to embrace the power of technology and AI to elevate your project. We do not expect you to use AI or Language Learning Models (LLMs) as a tool. However, if you do, we wanted to ensure the highest ethical standards are upheld.

If you are unsure about using AI in your research, please reach out to the ASEF Team at kyd0002@auburn.edu.

To guide us, we have copied the following language from the AI Use Policy from the Denver Metro Regional SEF: <a href="https://clas.ucdenver.edu/denversciencefair/ai-use-policy">https://clas.ucdenver.edu/denversciencefair/ai-use-policy</a>

Understanding the Basics: Before diving into the guidelines, let's establish a fundamental understanding of AI. LLMs like ChatGPT are artificial intelligence models designed to generate human-like text based on the input they receive. It is essential to know that LLMs operate on a knowledge cutoff, meaning they may not have information or updates beyond a certain date. Additionally, they can provide general information but might not always be accurate or context-aware.

Privacy and Safety: Your safety and privacy are of utmost importance. When using AI, avoid sharing personal information such as your real name, address, or contact details. It's best to use pseudonyms or remain anonymous in your interactions. Always remember that your AI bot of choice is a machine learning model; it lacks emotions, intentions, or personal connections, so treat it as a tool, not a friend or confidant.

Citation and Verification: While AI can be a valuable resource, it's crucial to verify the information it provides. Use it as a starting point for your research, but always cross-check facts and details from reliable sources. If you incorporate information from a LLM into your project, remember to cite it properly as a source, just as you would with any other reference.

Bias Awareness: Be aware that Al models can carry biases present in the data they were trained on. As responsible scientists, it is essential to critically assess the information you receive from an Al for potential biases. Address any biases you identify in your project and work to mitigate this wherever possible.

Ethical Considerations: Think about the ethical implications of using Al in your research. Uphold ethical principles in your work and discussions involving Al. The power of Al comes with responsibilities. Use it only for legitimate and ethical purposes. Avoid using it to generate false information, deceive, or harm others.



Al Limitations: Keep in mind that even LLMs may not always understand complex or context-specific questions. Start with specific, clear questions to receive accurate responses. Be patient and persistent in refining your queries to obtain the information you need.

Balance and Independence: Remember that AI is a tool to enhance your research, not a replacement for your own critical thinking and creativity. You can use it as a supplement to your work, but not as a replacement for your own independent research and analysis of your projects. You should not consider work produced by AI as your own.

Experimentation and Documentation: Document your interactions with AI including the questions you ask and the responses you receive. This documentation will help ensure transparency in your research process and should be included in your research notebook.

Seek Adult Guidance: Check with your guardians and any adults involved in your research project before engaging in Al use. If you have doubts or concerns about using Al in your project, consult with your teachers, mentors, or parents. They can provide guidance and help you navigate any challenges you encounter.

## Additional Resources:

Al vs. Machine Learning vs. Deep Learning vs. Neural Networks: What's the difference?

Video: How Large Language Models Work

Harvard Business School: Student Use Cases for Al

ChatGPT: An Introduction for Educators

Statement from the International Baccalaureate about Artificial Intelligence in Education

Ethical AI for Teaching and Learning

Shedding light on Al Bias with Real World Examples

How to Cite Al Use

## Exapmles of AI Tools:

<u>ChatGPT</u> Bard

**Bing Chat** 

Claude

**Khanmigo**