**Generative AI in cybersecurity: Practical applications**

You’ve been exploring ways that AI can be used in the field of cybersecurity, such as helping to identify and respond to threats. Next, you’ll consider how you might use generative AI to complete tasks that you might be responsible for as a cybersecurity professional.

In a previous reading, you learned that AI refers to computer programs that can complete cognitive tasks typically associated with human intelligence. One specific type of AI is **generative AI**, which is AI that can generate new content, like text, images, or other media. [Gemini](http://gemini.google.com/), [ChatGPT](https://chat.openai.com/) by OpenAI, and [Microsoft Copilot](https://www.microsoft.com/en-us/microsoft-copilot/) are examples of generative AI tools. You can interact with a generative AI tool by typing in a **prompt**, which is input that provides instructions to an AI tool about how to generate output. The tool then creates new content based on that prompt.

In your work as a cybersecurity professional, you can leverage generative AI tools to help you complete both practical and creative tasks. Consider these applications of generative AI tools that can help you work more efficiently and effectively:

* **Create content**. You can use generative AI tools to generate text, images, and other media. For example, you might create a large set of fake data to test the cybersecurity tools your organization uses.
* **Analyze information quickly**. Generative AI tools can analyze large amounts of content quickly. For example, you might use generative AI to summarize reports or meeting transcripts that contain important information related to the security of your organization, helping you identify key details quicker.
* **Answer questions in detailed and nuanced ways**. Generative AI is effective at summarizing information, which makes it useful for research. For example, you can prompt a generative AI tool to provide you with information about common types of cybersecurity threats, such as malware and ransomware.
* **Simplify day-to-day work**. You can also use generative AI to augment routine tasks. For example, AI tools can quickly provide an initial analysis of whether an email is likely to be malicious.

The ways you might use generative AI in your work will likely go beyond these examples as the capabilities of AI tools expand, and as you continue your own development as a cybersecurity professional.