

GenAI's role in skill development

Previously, you learned about the cloud security hiring process, including how to search for jobs, and how to communicate your skills and experiences. These skills will help you gain a better understanding of the job search experience. Even after you get your first cloud security job, the learning and research doesn't stop. Artificial intelligence (AI) is becoming a very valuable tool that cloud security analysts can use to diversify and grow their skills. In this reading, you'll learn more about generative AI (GenAI), and how it's used for personal and professional growth.

Use GenAI to strengthen security skills

In the rapidly evolving world of technology, GenAI has emerged as an important tool, particularly in strengthening security skills. GenAI offers unique and innovative solutions across various areas like education, simulations, and training.

Education

GenAI's ability to create tailored content can improve the quality of specialized education in the cloud security field. With the wide availability of GenAI on the internet, analysts can research and access security topics relevant to their specific industry and personal interests.

Consider this scenario: An analyst uses a GenAI chatbot to generate material about emerging cyber threats. The AI can consolidate information from various online sources, like scholarly articles, reports, or blogs that summarize the latest techniques and methods that threat actors employ. The analyst's access to this information allows them to stay up to date on security trends, and even share their findings with their team.

Try it out: Ask a GenAI chatbot to list the top cyber threats in cloud environments.

Simulations

Cloud security teams can use GenAI to generate simulated cyber attacks against their organization. GenAI can create attacks in multiple spaces, like email campaigns, fake chatbots, and more. These simulations enable security teams to practice identifying and responding to threats in a zero-risk environment. For example, a GenAI chatbot can generate a scenario where there's an attack against an organization's application source code. The team can then perform the necessary responsive actions to defend their system. After the simulation, a GenAI tool, like Google's Gemini for Workspace, can transform complex results from the simulation into plain text, and even point out attack vectors and vulnerabilities that need

attention. In this way, GenAI is useful as a tool analysts can use to practice cyber attack scenarios, and mitigate threats as a team.

Try it out: Ask a GenAI chatbot to create a simulated cyber attack scenario to learn more about how attacks are performed.

Training

Simulations help train teams, but GenAI also offers opportunities to train individuals. Security analysts can use GenAI chatbots to facilitate specialized conversations about security. Analysts can share their current skillset with the bot, and ask the bot how they can sharpen their existing skills, or gain expertise in a different area. The bot has the ability to respond with suggestions like how to diversify skills, or what online courses to take. GenAI can also list the skills that more senior security analysts typically possess, which helps junior analysts map their career path.

Try it out: Ask a GenAI chatbot to identify skills needed for specific security fields, like network security.

Key takeaways

Cloud security is a field with countless opportunities to continue learning and growing. The introduction of GenAI invites even more potential to gain skills as a security professional. Analysts can seek out personalized educational and training content, and security teams can sharpen their skills during generated simulation drills.