## CYBER SECURITY USING AI

My following idea was also asked to Meta AI and Copilot AI with the same response, "That's a fascinating idea!" and the same basic comments as Gemini AI.

Dan: My idea is to implement AI at the entrance of all databases connected to cyberspace to detect intrusions and stop threats before they can cause harm.

Gemini AI – Google: That's a fascinating idea!

AI can enhance cybersecurity by detecting threats at database entry points, improving incident response, and reducing false positives.

- Recommended electives include Cybersecurity Analytics, Network Security, and Advanced Topics in Cybersecurity.
- These electives can deepen understanding of AI maintenance and security principles.
- Strategic selection of electives is crucial for achieving goals in AI-powered security systems.
- 1. Implementing AI-powered security systems at the entry points of databases connected to cyberspace could significantly enhance threat detection and prevention. AI can analyze patterns, identify anomalies, and respond to potential threats in real time, thereby reducing the risk of cyberattacks. Some potential benefits of this approach include:
- Improved threat detection: AI can identify complex threats that traditional security systems might miss.

- Enhanced incident response: AI can respond quickly and effectively to potential threats, minimizing damage.
- Reduced false positives: AI can help filter out false alarms, reducing unnecessary resource utilization. However, it's essential to consider the following:
- 2. Maintenance of AI systems: Regular updates and maintenance are crucial to ensure the effectiveness of the AI system. What specific courses will be included in the Cybercrime Investigation and Cybersecurity program?

## My response:

- The CIC program includes the following courses:
- CJ 710: Applied Digital Forensic Investigation (Summer 2025, Term 2)
- · CJ 610: Cybercrime or a CIC Concentration Elective (Fall 2025, Term 1)
- · CIC Concentration Elective (Fall 2025, Term 2)
- CJ 610: Cybercrime or a CIC Concentration Elective (Spring 2026, Term 1, whichever was not taken in Fall 2025, Term 1)

## Gemini AI - Google:

Thanks for sharing the specific courses in the CIC program! Based on what you've listed, it seems like the program focuses heavily on the investigative and legal aspects of cybercrime, as well as providing flexibility through the concentration electives.

While the course titles themselves don't explicitly mention the maintenance of AI systems, the content within "Applied Digital Forensic Investigation" could certainly touch upon analyzing logs and identifying anomalies that might be generated by or related to AI security tools. Understanding digital forensics techniques would be valuable in assessing the effectiveness of AI

in preventing intrusions and in investigating incidents where AI might have been involved.

The "Cybercrime" courses would likely provide a strong foundation for understanding the types of threats that AI security systems would be designed to detect and prevent. Knowing the tactics and techniques of cybercriminals is crucial for ensuring that AI remains effective against evolving threats.

The key for you, given your interest in the maintenance of AI systems, would be to choose your "CIC Concentration Electives" strategically. When the time comes to select those courses, I would recommend looking for electives that delve deeper into areas like:

- · Cybersecurity Analytics: Courses focusing On data analysis for security, including anomaly detection and threat intelligence.
- Network Security: Understanding network infrastructure and security principles is essential for AI operating at network entry points.
- Advanced Topics in Cybersecurity: These might cover more specialized areas like AI in security or machine learning for cyber defense.
- Do you have a list of potential concentration electives available? If so, we could explore which ones might be the most relevant to your goal of understanding and maintaining AI-powered security systems.

As you prepare to embark on this academic journey, remember to stay focused, work hard, and take advantage of the resources and opportunities available to you at Boston University's Metropolitan College.

Don't hesitate to reach out to your academic department or instructors if you have any questions or need guidance. They are there to support you throughout your program.

You're about to embark on an exciting and challenging journey. I'm confident that you will excel in the program and make valuable contributions to the field of cybersecurity. Good luck, and may God guide you in your endeavors!

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