



HELLENIC

Will AI replace CISOs?

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Who is ISC2?

- **Largest** nonprofit membership association of certified cybersecurity professionals
- Provider of lifelong professional **security education**
- **Global advocate** for the growth of the security profession
- **600.000** members, associates and candidates
- **170** Countries





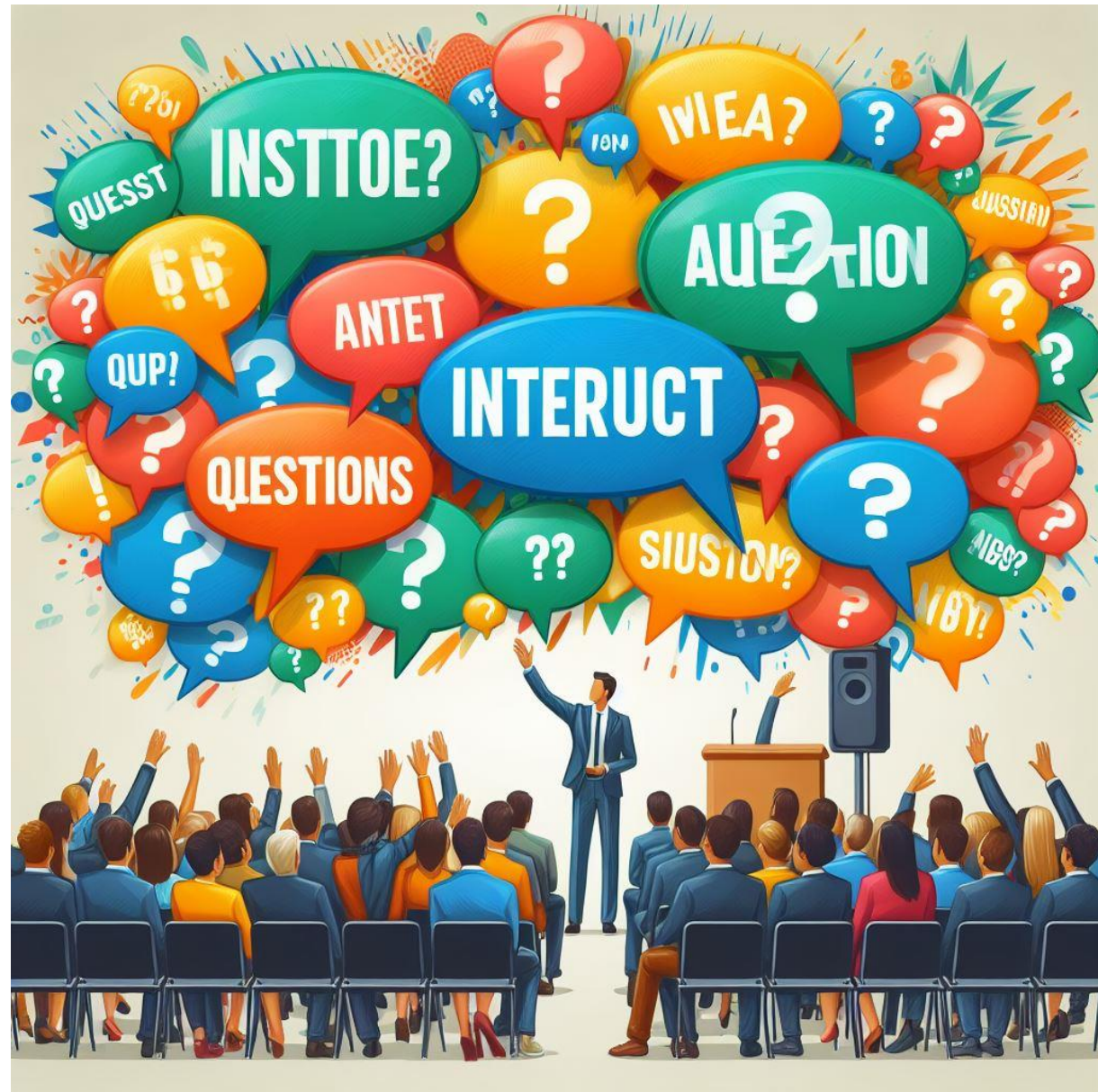
ISC2 Hellenic Chapter

- Official ISC2 Chapter (No: 128), 8/7/2014
- Non-Profit Association (No: 30693), 24/6/2015
- Our Mission:

Exchange of ideas and dissemination of knowledge among ISC2 members, information security professionals and the public, as well as the promotion ISC2 Certifications in the region.



Interrupt me,
at will



AI & CISOs = the Agenda

What is it?



AI is finally here; so what?



Now, what should we do?

AI: what is it?

AI: a passing novelty?

President of Michigan Savings Bank → Henry Ford's lawyer:

...don't invest in Ford Company because the horse will continue to be the primary form of transportation while the automobile is just a passing novelty [1]



AI; what can('t) it do?

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So what?

Will AI take over the CISO role?

Ahoy captain! AI CISO-bots ahead!

- Accelerating security checks of source code [2]
- Automating Compliance [3]
- CISO sleeping position, *tireless mode* on.



however, AI CISO-bots can't...

- Align Security with Business...
- Conquer and cultivate *soft skills*
- Meticulously select AI - ethical boundaries [5]
- Ban AI if unacceptable risk (e.g. Stackoverflow [4])
- Compensate for new AI risks in S/W development [6]



Why AI will never become a CISO

Chief Incident Scapegoat Officer



It's good to have a human CISO around...

- Wells notice* [served to Solarwinds CISO](#)
- [Uber CISO convicted](#)
- [Clorox CISO departs](#) after incident



* "notification issued by regulators to inform individuals or companies of completed investigations where infractions have been discovered... the nature of the enforcement proceedings to be initiated against the recipient"

Now, what should CISOs do?

Going back to the basics

~250 B.C.

the lever

Archimedes - the first one to talk about AI



Δῶς μοι πᾶ στῶ καὶ τὰν γᾶν κινάσω

(it does sound Greek to us...)

Give me a place on which to stand,
and I will move the Earth

CISOs leveraging AI...

- AI: 3rd major catalyst for security controls [7]
- Customized apprenticeship for professionals [8]
- AI becoming a sine qua non feature in IDS's [9]



Luke, beware of the Dark Side...

- Amazing deepfakes ([10\\$ - 10 minutes](#))
- Powerful attacker tools (e.g. PentestGPT) [10]
- Leaked copyrighted content used as AI input [10]
- AI output violating copyright; user is not aware. [10]
- 45% of pros: biggest security challenges stem from AI [7]
- Effectiveness of [Business Email Compromise attacks beyond expectations](#)



Questions



References

- [1] Bushnell, ST. The Truth About Henry Ford, The Reilly & Lee Company, USA, 1992
- [2] [Use Generative AI To Jump Start Software Security Testing](#), 2023
- [3] [AI is Enhancing GRC Processes and Decision-Making](#), 2023
- [4] [Temporary policy: Generative AI \(e.g., ChatGPT\) is banned](#), 2022
- [5] [Implementing Artificial Intelligence: Capabilities and Risk](#), 2022
- [6] [Slight Street Sign Modifications Can Completely Fool Machine Learning Algorithms](#), 2017
- [7] [Global Workforce Survey](#), 2024
- [8] [The organization of the future: Enabled by gen AI, driven by people](#), 2023
- [9] [Artificial Intelligence trends in IoT Intrusion Detection Systems: a systematic mapping review](#), 2022
- [10] [The Promise and Peril of the AI Revolution - Managing Risk](#), 2023



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Thank you!

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