

Cybersecurity Awareness Calendar 2024

February

Quantum Computing and Cryptography

Turning up Neon Lights for Awareness Nights!



ECSO aims to spread awareness of key aspects of cybersecurity and showcase ECSO Members and the cybersecurity community's solutions and services.

Introducing our 2024 topics:

January: Zero Trust February: Quantum Computing and Cryptography March: Ransomware April: Cybersecurity Solutions to Secure SME Businesses May: The Road to a Career in cyber June: Supply Chain July: European Regulations and Compliance August: Generative Al September: Internet Of Things (IOT) October: Artificial Intelligence November: Threat Vulnerability December: Cloud Computing



Resources from our Members



Migration to quantum-resistant algorithms in mobile networks

ERICSSON

The risk that large and robust quantum computers may be built in a few decades urges us to plan for the migration of our ICT systems to quantum-resistant cryptography. Future 5G releases will initiate this migration and make 6G fully quantum-resistant from the start. Here, we take a detailed look at what such a migration will look like and share insights into progress.

Discover more <u>HERE</u>.

Securing the Future: Quantum Computing and Cybersecurity Innovations

The interaction between quantum computing and cryptography is driving innovation in cybersecurity, pushing towards the development of advanced cryptographic systems capable of withstanding the capabilities of future quantum computers and leveraging quantum properties for new security paradigms.

Exprivia can provide consultancy for the transition to quantum-ready security systems, customised risk assessments, and training for IT teams on the potential dangers associated with quantum computers and how to mitigate them. This proactive approach not only protects customers from current threats but also prepares them to face future security challenges in a rapidly evolving technological landscape.

Find out more HERE.

Learn how to manage risks in emerging technologies on the Cybersecurity Learning Hub (FOR FREE!)



Want to learn about <u>Security Considerations for Emerging Technologies</u> and how to manage cybersecurity risks in emerging technologies such as quantum computing and cryptography.

Security Considerations for Emerging Technology is a module under the <u>Cybersecurity Career Path</u> - part of the Cybersecurity Learning Hub which is an initiative designed to tackle the global cybersecurity skills shortage. Hosted on Trailhead, Salesforce's learning platform, it provides over 70 free courses with career oriented information, expert interviews and training modules.

The <u>Cybersecurity Learning Hub</u> is brought to you by the The World Economic Forum, Salesforce, Fortinet and the Global Cyber Alliance. You can also check out other cybersecurity courses, roles and learn vital skills for free whilst you're there!

Learn about cryptography with ISC2

Certificates

The ISC2 Security Administration and Operations Certificates: Cryptography explores the fundamental concepts, techniques and applications of modern cryptography. <u>Learn more</u>.

Certifications

Cryptography is one of the seven domains of the ISC2 SSCP certification. The SSCP certification recognies those with the demonstrated knowledge, skills and abilities for understanding and applying cryptography alongside a broad array of security practices and concepts. Learn more.

Training

The ISC2 SSCP certification training explores all the domains of the certification, including cryptography. Learn more.



Resources from the Community



Are you quantum-safe? Migrate to PQC now!

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Quantum computing heralds a major leap in technology, but it poses a significant threat to cybersecurity, particularly in cryptography. Current asymmetric algorithms will become obsolete by 2037, as per the Global Risk Institute's Quantum Threat Timeline Report. Therefore, migrating to post-quantum cryptography (PQC) is crucial. This shift mirrors the complexity of transitioning from SHA-1 to SHA-2, if not more daunting. Protect your organiation from 'Harvest now, decrypt later' attacks with our comprehensive PQC Migration Guide and expert support for a seamless transition. Find out more HERE.

Opportunities, Threats, and the Quest for Secure Cryptography in a Quantum Computing Era



Quantum computing represents a transformative breakthrough in computational science, harnessing the principles of quantum mechanics to perform calculations at speeds that were previously thought to be impossible. However, despite holding great promise for solving complex problems, it also poses a significant threat to traditional cryptographic methods that form the backbone of modern cybersecurity. More here. Learn more <u>HERE</u>.

Quantum Odyssey eduTech tool



Octogon HUB and Quarks Interactive have been collaborating for three years to train global specialists in quantum Computing through an edutech tool. Quantum Odyssey is an R&D product in the Technological Transfer phase that generates game situations on three levels of complexity. In addition to a pleasant, innovative and futuristic experience, Quantum Odyssey offers the possibility to simulate quantum solutions of a much greater complexity than current real quantum computers. Learn more <u>HERE</u> and <u>HERE</u>.

Thank you for your time!

The Cybersecurity Awareness Calendar is an initiative launched by: European Cyber Security Organisation (ECSO) Avenue des Arts 46 1000, Brussels









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