

# Information Systems Security

## Oral Exam Presentations Questions

January-February 2022

### Presentation Questions

- **Electromagnetic Side-Channel Attacks** : What is a profiling device ? Explain how it is used in the context of an attack by template analysis to verify pin codes.
- **GEOINT** : When doing GEOINT, what kind of information can be derived from images?
- **Cross Site Scripting (XSS) Attacks** : What are the differences between an XSS DOM attack and an XSS Stored attack ?
- **Biometric Authentication** : What is the main concern about secure biometric authentication ?
- **Adversarial Attacks in Machine Learning** : What are adversarial examples ?
- **Car Hacking** : Why has car hacking become more and more dangerous nowadays ?
- **SQL Injection** : What is an SQL Injection ?
- **GDPR** : Explain what is GDPR, and why it is necessary.
- **Cryptocurrencies De-Anonymization and Tracking Techniques** : Explain how clustering works in the context of cryptocurrencies de-anonymisation.
- **Quantum Computers and the Future of Encryption** : How will quantum computers impact both symmetric and asymmetric cryptography ?
- **Electronic Voting** : What is 'Air Gapping' in Electronic Voting Machines and how does it help election security ?

- **Buffer Overflow Attacks** : What are the different types of attacks that can be mounted from a buffer overflow ?
- **Electronic ID Security - NFC et Amiibos** : What are the main security issues with NFC (for example with amiibos) ?
- **Steganographic Techniques** : What is the difference between Steganography and Cryptography ?
- **Stuxnet** : Explain zero-day attacks and name one of the zero-day vulnerabilities which were used by Stuxnet.
- **Docker Containers Security** : Cite two advantages of docker containers.
- **Security in Vehicular Ad hoc NETWORKS (VANETs)** : What are the main applications of VANETs ?
- **IoT Security** : What are the reasons for IoT security vulnerabilities ?
- **Rainbow tables** : Explain how to defend against rainbow tables.
- **Blockchain Technologies** : What are the key features of public blockchain technology ?