EUROPEAN INFORMATION TECHNOLOGIES CERTIFICATION INSTITUTE, ASBL.
Brussels, Belgium, European Union

CERTIFICATE

Ziad Abdelrahman

Has successfully completed test requirements of
The European Information Technologies Certification Programme

EITC/IS/CCF Classical Cryptography Fundamentals

Certification Programme examination result: 93.33%

Certification Programme description:

Introduction to cryptography; History of cryptography: modular arithmetic and historical ciphers; Stream ciphers: stream ciphers, random numbers and the one-time pad, stream ciphers and linear feedback shift registers; DES block cipher cryptosystem: Data Encryption Standard (DES) â€" encryption, Data Encryption Standard (DES) - key schedule and decryption; AES block cipher cryptosystem: introduction to Galois Fields for the AES, Advanced Encryption Standard (AES); Applications of block ciphers: modes of operation for block ciphers; Conclusions for private-key cryptography: multiple encryption and brute-force attacks; Introduction to public-key cryptography: number theory for PKC â€" Euclidean Algorithm, Eulerâ€™s Phi Function and Euler`s Theorem, the RSA cryptosystem and efficient exponentiation

Certificate Programme version/revision: EITC/IS/CCFv1r1

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