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| EDUCATION | University of Southern California Ph.D. in Computer Science - May 2005 | Los Angeles, CA |
| | University of Southern California M.S. in Computer Science - May 2004 | Los Angeles, CA |
| | King Fahd University of Petroleum and Minerals M.S. in Computer Science - May 1997 | Dhahran, Saudi Arabia |
| | King Fahd University of Petroleum and Minerals B.S. in Computer Science - May 1994 | Dhahran, Saudi Arabia |

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| TEACHING EXPERIENCE May 05 - Present | King Fahd University of Petroleum and Minerals <i>Assistant Professor</i> - Computer Science Department Teaching CS theoretical courses: Cryptography and Data Security, Theory of Computation, Algorithms, and Discrete Mathematics. Member of the Curricula Committee - ICS dept. | Dhahran, Saudi Arabia | |
| | Jan 01 - May 04 | University of Southern California <i>Teaching Assistant</i> - Computer Science Department Teaching several CS courses: Analysis of Algorithms, Discrete Methods in Computer Science, Introduction to Computer Science, Java Programming, C++, and Data structure. | Los Angeles, CA |
| | Aug 98 - May 05 | King Fahd University of Petroleum and Minerals <i>Lecturer</i> - Computer Science Department | Dhahran, Saudi Arabia |
| | Aug 94 - Aug 98 | King Fahd University of Petroleum and Minerals <i>Graduate Assistant</i> - Computer Science Department | Dhahran, Saudi Arabia |

PUBLICATIONS

1. Sulaiman Al-Bassam, Ramarathnam Venkatesan, Sultan Al-Muhammadi, "New single asymmetric error-correcting codes", IEEE Transactions on Information Theory 43(5): 1619-1623 (1997)
2. Sultan Al-Muhammadi and Sulaiman Al-Bassam, "A new Single Asymmetric Error Correcting Code", IEEE-CCECE, May 1997
3. Sulaiman Al-Bassam, Sultan Al-Muhammadi, "A single asymmetric error-correcting code with 213 codewords of dimension 17", IEEE Transactions on Information Theory 46(1): 269-271 (2000)
4. Sultan Almuhammadi, Nien T. Sui and Dennis McLeod, "Better Privacy and Security in E-Commerce: Using Elliptic Curve-Based Zero-Knowledge Proofs", Proceedings of the IEEE CEC'04, San Diego, California, pp. 299-302, July 2004
5. Sultan Almuhammadi and Clifford Neuman, "Security and Privacy Using One-Round Zero-Knowledge Proofs", Proceedings of the IEEE CEC'05, Germany, July 2005
6. Sultan Almuhammadi and Nien T. Sui, "Safe Credential-Based Trust Protocols: A Framework", Proceedings of the IEEE-ACM WI'06, Hong Kong, China, Dec. 2006
7. Abulrhman Alsri, Sultan Almuhammadi and Sajjad Mahmood "A Model for Work Distribution in Global Software Development Based on Machine Learning Techniques", Proceedings of the IEEE-SAI, pp. 399 – 403, Aug. 2014

8. Sultan Almuhammadi, Ahmad Amro, "Double Hashing Operation Mode for Encryption", IEEE 7th Annual Computing and Communication Workshop and Conference, Las Vegas, USA, Jan. 2017
9. Sultan Almuhammadi and Majeed Alsaleh, "Information Security Maturity Model for NIST Cyber Security Framework", The 6th International Conference on Information Convergence and Services (ITCS), Australia, pp. 51-62, 2017.
10. Ahmad Amro, Sultan Almuhammadi and Sami Zhioua, "NetInfoMiner: High-level information extraction from network traffic", Proceeding of the IEEE on Big Data and Smart Computing, S. Korea, pp. 143-150, Feb. 2017.
11. Ahmed Abouollo and Sultan Almuhammadi, "Detecting malicious user accounts using Canvas Fingerprint", Proceeding of the IEEE ICICS, Jordan, 2017.
12. Sultan Almuhammadi and Ahmad Al-Shaaby, "Recent Approaches Combining Cryptography and Steganography: A Survey", Proceeding of ITCS, Australia, 2017.
13. Sultan Almuhammadi and Ibraheem Al-Hejri, "A Comparative Analysis of AES Common Modes of Operation", Proceeding of the IEEE 30th CCECE, Canada, 2017.
14. Sultan Alsheibani and Sultan Almuhammadi, "Anomaly Detection: Firewalls Capabilities and Limitations", The International Conference on Computing Sciences and Engineering (ICCSE), Kuwait, 2018.
15. Sultan Almuhammadi, Ibraheem Al-Hejri, G. Bin Talib and Awadh Gaamel, "NLFRS Functions with Optimal Periods", International Conference on Computational Science and Its Applications. Springer, 2018.
16. Ibraheem Al-Hejri and Sultan Almuhammadi, "New NLFSR Functions of Degree 3 with Optimal Periods", Wireless Telecommunications Symposium (WTS), USA, 2019.
17. Sultan Almuhammadi and Omar Bawazeer, "Performance and Security Analysis of Hash Functions", Wireless Telecommunications Symposium (WTS), USA, 2019.
18. Ibraheem Al-Hejri and Sultan Almuhammadi, "Constructing New NLFSR Functions of with Optimal Periods", International Journal of Interdisciplinary Telecommunications and Networking (IJITN), Vol 12(4), pp. 71–80, 2020.

RESEARCH INTERESTS

Cryptography, Information Security, and Algorithms.

COMPUTER PROFICIENCY

Operating Systems: UNIX, Windows, Mac OS

Programming Languages: Java, c/C++, Python, Visual Basic, Pascal, LISP, Prolog, SQL, Fortran, Cobol.

Internet/Database Technology: HTML, PHP, ASP, JavaScript, VB Script, MS Access

HONORS

University of Southern California, Los Angeles, CA
Outstanding Teaching Award – Fall 2002