CURRICULUM VITAE

Zeyad Hashem Desuqi Mohammad

Department of Cybersecurity/Faculty of Science and Information Technology,

Alzaytoonah University of Jordan, Amman, Jordan

***Phone:* +962-796910840**

Fax: N/A

E-mail: 1996@zuj.edu.jo

Homepage: http://www.zuj.edu.jo/portal/emp-1996/

1. Personal Data

Date of Birth: 22-04-1972
Nationality: Jordanian

2. Education

- Ph.D. (Cryptography and Network Security) 2010, **National Chiao Tung University, Hsinchu-Taiwan.**
- M.Sc. (Computer Science) 2004, **Amman Arab University for Graduate Studies, Amman - Jordan**.
- B.Sc. (Computer Science) 1996, **Mu'tha University, Karak – Jordan**.

3. Ph.D. Dissertation

Title: *"*Cryptanalysis and Enhancement of Authenticated Key Agreement Protocols and Their Security Models*"* **National Chiao Tung University, Hsinchu-Taiwan**.

4. Employment

Academic Positions

- Associate Professor, Department of Cybersecurity, Alzaytoonah University of Jordan, Amman, Jordan. September, 2021– Present.

- Assistant Professor(A), Department of Computer Science, Alzaytoonah University of Jordan, Amman, Jordan.
  September, 2020 – 2021.

- Assistant Professor(A), Department of Management Information System, Alzaytoonah University of Jordan, Amman, Jordan.
  September, 2019 – August 2020.

- Assistant Professor, Department of Computer Science, Alzaytoonah University of Jordan, Amman, Jordan.
  September, 2013 – August 2019.

- Assistant Professor, Department of Management Information System, Alzaytoonah University of Jordan, Amman, Jordan.
  Octber, 2010 – August 2013.

- Lecturer of computer science, Department of Information Technology, AL Balqa` Applied University/Salt College, Salt – Jordan.
  Sep. 2004 – Sep. 2006.

- Instructor, Department of Information Technology, AL Balqa` Applied University/Salt College, Salt – Jordan.
  Sep. 2004 – Sep. 2006.
  Feb 2001-Sep 2004.

- Teacher/Lecturer of computer science, Department of Computer Science, Ideal Institute for Technical Studies, Dammam-K.S.A.
  June 1998- June 2000.

- Instructor of computer science, Dar Allughat Center, Salt – Jordan.
  June 1997- May 1998.

- Teacher of computer science, Ministry of Education, South Shuna-Jordan.
  Sep. 1996 – Jun. 1997.

Administrative Positions

- N/A

5. **Research Interests**
   Key Agreement protocols and Their Security models, Cryptanalysis, Internet of Things, Design and Analysis Algorithms, IP Routing Protocols and Fog Computing.

6. **Membership in Scientific Societies and Associations**
   N/A

7. **Honors and Awards**
   - The International Biographical Centre-Cambridge Certificate for Outstanding Engineering Achievement (2016).
   - Marquis Who's Who in Science and Engineering (2011)
   - Ph.D (Honor) in cryptography and network security from institute of information management, NCTU, 2010.
   - Teacher Assistant, NCTU, Hsinchu, Taiwan.
   - Research Assistant, user authentication projects, National Science Council and Chang Gung University, Taiwan.

8. **Fellowships and Scholarships**
   - Ph.D Scholarship, 4 years, NCTU, Hsinchu, Taiwan, 2005-2009.
   - Bachelor of Science in Computer Science Scholarship, 4 years, Ministry of high education, Jordan, 1992-1996.

9. **Teaching Experience**

   - ***Graduate Courses***

     Wireless Networks and advanced Internet Technology

   - ***Undergraduate Courses***

     Information security, Network security, Network monitoring and documentation, Network management, Computer wireless network, Computer network, Data structure, Operating system, Computer algorithm, Java programing I & II, Network design and simulation I & II, VoIP, Computer skills, Visual Basic, C sharp, C++, Visual C++, Data base, PC components, ECDL/ICDL, Pascal, MS Office, MS-DOS, Principle of programming, Office automation, System analysis and design, Computer application in accounting, Computer application in marketing, Computer application in administration, Computer application in finance, Information management, Data business communication, data analytics and business intelligence, special topics in computer science.

10. Supervision of Graduate Research

- Co Advisor of Mohamad Mustafa Ahmad Al-Samhouri – Master of Computer Science – Al al-Bayt University. 2019-2021. Thesis: A Lightweight Authenticated Key Agreement Protocol Based on Hyperelliptic Curve with Security Verification for Securing the Internet of Things.
- Advisor of Kholoud Saleh Master of Computer Science – Alzaytoonah University of Jordan. 2018-2020. Thesis: A Secure and Efficient authenticated key agreement protocol based on Elliptic Curve for Securing the Fog Computing Environment.
- Advisor of Thaer Mohammad Taha Abu Qattam – Master of Computer Science – Alzaytoonah University of Jordan. 2017-2019. Thesis: An Enhanced Lightweight Authenticated Elliptic Curve Key Exchange Protocol for Securing Internet of Things.
- Co Advisor of Ali Al-thaher – Master of Computer Science – Alzaytoonah University of Jordan. 2017-2019. Thesis: AN EFFICIENT AND SECURE KEY EXCHANGE PROTOCOL BASED ON ELLIPTIC CURVE AND SECURITY MODELS.

11. Grants

N/A

12. Patents

N/A

13. Membership of Committees

- **University**
  - ***Quality Assurance Committee., 9/2017-present.***
  - ***Course Plans Committee. 9/2017-present.***
  - ***Exams and Evaluation Committee. 9/2015-6/2016.***

14. Professional and Scientific Meetings

Scientific Meetings Organized

N/A.

Participation in Scientific meetings

- The 8th international conference on information technology, Alzaytoonah University of Jordan, Amman, Jordan, 2017

15. Participation in or organization of curricular and/or extra-curricular activities

N/A

16. Publications

- Journal Papers:
  1. Ahmad Abusukhon, Zeyad Mohammad, Ali Al-Thaher, An authenticated, secure, and mutable multiple-session-keys protocol based on elliptic curve cryptography and text-to-image encryption algorithm, Concurrency and Computation: Practice and Experience, e6649, 2021.
  2. Z. Mohammad, Cryptanalysis and Improvement of the YAK Protocol with Formal Security Proof and Security Verification Via Scyther, International Journal of Communication System, vol. 33, no. 9, pp. 1-22, SCIE
  3. Z. Mohammad, "Cryptanalysis of an efficient protocol for authenticated key agreement," ICIC Express Letters, vol. 13, no. 4, pp. 293–301, 2019. Scopus
  4. A. Abusukhon, M. N. Anwar, Z. Mohammad, and B. Alghannam, "A hybrid network security algorithm based on diffie hellman and text-to-image encryption algorithm," Journal of Discrete Mathematical Sciences and Cryptography, pp. 1–17, 2019. Scopus
  5. Zeyad Mohammad, Ahmad Abusukhon, Adnan A. Hnaif, and Issa S. Al-Otoum, "Performance Analysis of Route Redistribution among Diverse Dynamic Routing Protocols based on OPNET Simulation",(IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 8, No. 3, pp. 324-332, March 2017, ESCI, Scopus.
  6. Zeyad Mohammad, Ahmad Abusukhon, and Marzooq A. Al-Maitah, "A COMPARATIVE PERFORMANCE ANALYSIS OF ROUTE REDISTRIBUTION AMONG THREE DIFFERENT ROUTING PROTOCOLS BASED ON OPNET SIMULATION", International Journal of Computer Networks & Communications (IJCNC), Vol.9, No.2, pp. 39-57, March 2017, ERA, Scopus.
  7. Zeyad Mohammad, Chien-Lung Hsu ,Yaw-Chung Chen and Chi-Chun Lo, Cryptanalysis of a secure and efficient three-pass authenticated key agreement protocol based on elliptic curves, Journal of Internet Technology, Vol. 14 No. 2, March 2013, Scopus & SCI.
  8. Zeyad Mohammad, Chien-Lung Hsu ,Yaw-Chung Chen and Chi-Chun Lo, An efficient and secure three-pass authenticated key agreement elliptic curve based protocol, International Journal of Innovative Computing, Information and Control, Vol. 7, No. 3, March, 2011, Scopus & SCI .
  9. Zeyad Mohammad, Yaw-Chung Chen, Chien-Lung Hsu and Chi-Chun Lo, Cryptanalysis and enhancement of authenticated key agreement with key

confirmation, IETE Technical Review, vol. 27, no. 3, pp. 252-265, 2010. Scopus & SCI

- Conference Papers:
  1. Vincent Omollo Nyangaresi, Zeyad Mohammad, Privacy Preservation Protocol for Smart Grid Networks, 2021 International Telecommunications Conference (ITC-Egypt), IEEE, 2021.
  2. Z. Mohammad, Ahmad AA alkhatib, Mohammed Lafi, Ahmad Abusukhon, Dheeb Albashish and Jaffar Atwan, Cryptanalysis of a Tightly-Secure Authenticated Key Exchange without NAXOS Approach Based on Decision Linear Problem, 2021 International Conference on Information Technology (ICIT), Amman, Jordan, IEEE, accepted May 2021.
  3. Z. Mohammad, Vincent Nyangaresi and Ahmad Abusukhon, On the Security of the Standardized MQV Protocol and Its Based Evolution Protocols, 2021 International Conference on Information Technology (ICIT), Amman, Jordan, IEEE, accepted May 2021.
  4. Ahmad AA Alkhatib, Zeyad Mohammad and Eman Abu Maria, ROAD TRAFFIC Management SOLUTIONS, 2021 International Conference on Information Technology (ICIT), Amman, Jordan, IEEE, accepted May 2021.
  5. Abusukhon, Ahmad, Zeyad Mohammad, and Ali Al-Thaher. "Efficient and Secure Key Exchange Protocol Based on Elliptic Curve and Security Models." In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), pp. 73-78. IEEE, 2019.
  6. Mohammad, Zeyad, Ahmad Abusukhon, and Thaer Abu Qattam. "A Survey of Authenticated Key Agreement Protocols for Securing IoT." In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), pp. 425-430. IEEE, 2019.
  7. Mohammad, Zeyad, Thaer Abu Qattam, and Kholoud Saleh. "Security Weaknesses and Attacks on the Internet of Things Applications." In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), pp. 431-436. IEEE, 2019.
  8. Ahmad Abusukhon, Zeyad Mohammad, and Mohammad Talib, A Novel Network Security Algorithm Based on Encrypting Text into a White-page Image, Proceedings of the World Congress on Engineering and Computer Science 2016 Vol I WCECS 2016, October 19-21, 2016, San Francisco, USA, Scopus.
  9. Zeyad Mohammad and Chi-Chun Lo, Vulnerability of an improved elliptic curve Diffie-Hellman key agreement and its enhancement, E-Business and Information System Security, 2009. EBISS '09. Wuhan, China, IEEE Computer Society, pp.1-5, 2009, Scopus.
- Books:
  1. Zeyad Desuqi Mohammad et al. Computer Skills :(Introduction, Windows, Dos, MSWord, Excel, Internet). Dar Al-Motaz, Amman, Jordan, 2002.