

## CURRICULUM VITAE

**Adnan Ahmad Abdelfattah Hnaif**



*Computer Science/ Faculty of Science and Information Technology*

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### 1. Personal Data

Date of Birth: 19/09/1975

Nationality: Jordanian

### 2. Education

- Ph.D. (Network Security) 2010, Universiti Sains Malaysia (USM) , Penang, Malaysia
- M.Sc. (Specialization) Year, Name of University, City, State, Country
- B.Sc. (Specialization) Year, Name of University, City, State, Country

### 3. Ph.D. Dissertation

*Multi-processing Scalable String Matching Algorithm for Network Intrusion Detection System, USM, Penang, Malaysia.*

### 4. Employment

#### Academic Positions

- Associate Professor, Computer Science, Al-zaytoonah University of Jordan, Amman, Jordan  
Feb. 02, 2016.



### Administrative Positions

- Chairman of Computer Science Department, Science and Information Technology, Al-zaytoonah University of Jordan, Amman, Jordan – 2017- till now.
- Chairman of Computer Network Department, Science and Information Technology, Al-zaytoonah University of Jordan, Amman, Jordan – 2015- 2017.
- Chairman of Computer Science Department, Science and Information Technology, Al-zaytoonah University of Jordan, Amman, Jordan – 2011- 2013.

### 5. Research Interests

- 1- My research interests are focusing on exact string matching algorithms, Internet of Things (IoT), computer networks and communications.
- 2- Parallel Computing.
- 3- Information Security.

### 6. Teaching Experience

#### • Graduate Courses

- Research Seminar for Master.
- Parallel Programming
- Advanced Data Networking and Communications

#### • Undergraduate Courses

- Computer Networks and Communications 1 + 2
- Network Security
- Network Monitoring and Documentation
- Object Oriented Programming
- Mobile Programming
- Databases

### 7. Membership in Scientific Societies and Associations

International Journal of Computer Networks & Communications (IJCNC)



## 8. Honors and Awards

2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)

## 9. Supervision of Graduate Research

- Main supervisor for master student “A Query Based Approach to information extraction in Wireless Sensor Networks Using Watershed Algorithm”, Al-Zaytoonah University of Jordan, Jordan, 2017.
- Main supervisor for master student “An Intelligent Road Traffic Management System Based on a Dynamic Routing Technique and Improved Human Community Genetic Algorithm”, Al-Zaytoonah University of Jordan, Jordan, 2016.
- Co-supervisor for master student “Multiprocessing String Matching Algorithm for Network Intrusion Detection System”, Al-Zaytoonah University of Jordan, Jordan, 2016.
- Co-supervisor for master student “An Improved Approach for Secured Mobile Payment System Based on Public-Key Cryptography” Al-Zaytoonah University of Jordan, Jordan, 2015.

## 10. Grants

## 11. Patents

## 12. Membership of Committees

- **National and International**

- *Assistant Editor-in-Chief of the Journal International Journal of Advanced Soft Computing and its Applications.*
- *Member of Editorial and Reviewer Board for the journal IJITCS.*
- *Committee of Study and Educational Resources.*
- *Committee of Examinations and Evaluation.*
- *Committee of Guidance, Equation, Training and Follow-up of Graduates.*
- *Committee of Quality Assurance.*
- *Committee of Scientific Research.*



### **13. Professional and Scientific Meetings**

#### ***Scientific Meeting Organized***

- Colloquium Chair: the 1<sup>st</sup> information Technology Colloquium 2010, ITC'10, Faculty of Science and IT, Al-Zaytoonah University of Jordan, 20<sup>th</sup> April 2010.
- Colloquium Chair: the 2<sup>st</sup> information Technology Colloquium 2012, ITC'12, Faculty of Science and IT, Al-Zaytoonah University of Jordan, 17<sup>th</sup> April 2012.
- Colloquium Chair: the 3<sup>st</sup> information Technology Colloquium 2014, ITC'14, Faculty of Science and IT, Al-Zaytoonah University of Jordan, 20<sup>th</sup> April 2014.
- Publicity Committee: the 8<sup>st</sup> International Conference on Information Technology ICIT2017, Al-Zaytoonah University of Jordan, MAY 2014.
- Track Chair: 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), Jordan, April 2019

#### ***Participation in Scientific Meeting***

- Participate in the 9<sup>th</sup> International Conference on Information Technology ICIT 2019, Data Science, Al-Zaytoonah University of Jordan, Amman, Jordan, April 2019.
- Participate in the 8<sup>th</sup> International Conference on Information Technology ICIT 2017, Al-Zaytoonah University of Jordan, Amman, Jordan, May 2017.

### **14. Participation in or organization of curricular and/or extra-curricular activities**

- 1- Attending a training workshop in the field of e-learning and preparing computerized courses. 2019
- 2- Arbitrator at the 20th Creative Forum "Globalization and its impact on developing countries / challenges and opportunities". 2018



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Curriculum Vitae Form - Procedures of Appointment and Promotion Committee

- 3- Implementing a workshop on server hardware (Virtualization VM, Domain Control, DHCP and DNS Servers) and how it works. 2017.
- 4- Join Microsoft and Jordanian Universities Network (JUNet) in our 2017-2018 Academic Day. 2017
- 5- Participated in Quality Management System Foundation Course "ISO 9001:2015. 2017
- 6- Participated in a training course entitled by TEST CONSTRUCTION AND ANALYSIS OF RESULTS. 2017
- 7- Attending MICROSOFT DAY CONFERENCE 2016. 2016
- 8- Implementing a workshop entitled by MODERN TECHNOLOGIES IN COMPUTER NETWORKS. 2016
- 9- Attending a workshop entitled experts from the European Union in coordination with the Tempus office 2015 .
- 10- Attending a workshop entitled E-Learning is a basic necessity to achieve a knowledge society. 2015.

## **15. Publications**

### **A. Journal Papers**

- 1- Adnan A. Hnaif, Khalid Mohammad Jaber, Mohammad A. Alia, and Mohammed E. Daghbosheh, Parallel Scalable Approximate Matching Algorithm for Network Intrusion Detection System, The International Arab Journal of Information Technology (IAJI), ISI (IF 0.8), 2020, Accepted
- 2- Adnan A. Hnaif, Ali Aldahoud, Mohammad A. Alia, Issa S. Al'otoum and Duaa Nazzal, "Multiprocessing scalable string matching algorithm for network intrusion detection system", International Journal of High Performance Systems Architecture, Int. J. High Performance Systems Architecture, Vol. 8, No. 3, 2019
- 3- Ahmad AA Alkhatib, Adnan A. Hnaif, and Tarek Kanan, "Proposed simple system for Road Traffic Counting", International Journal of Sensors, Wireless Communications and Control, 2018 Vol. 8(3).
- 4- Mohammad A. Alia, Adnan A. Hnaif, Ayman M. Abdalla and Eman Abu Maria, "An Improved Authentication Scheme Based on Graphical Passwords", 2018 August 2018 ICIC Express Letters 12(8):775-783, August 2018 ICIC Express Letters 12(8):775-783



- 5- Adnan A. Hnaif, Amnah El-Obaid And Nancy Al-Ramahi, "Traffic Light Management System Based On Hamiltonian Routing Technique", Journal of Theoretical and Applied Information Technology, 30th June 2017. Vol.95. No 12, 2017, pages 2792 – 2802
- 6- Ahmad A. A. Alkhatib, Mohammad Alia, Adnan Hnaif, " Smart System for Forest Fire Using Sensor Network", International Journal of Security and Its Applications, Vol. 11, No. 7 (2017), pp.1-16, 2017
- 7- Ahmad A. A. Alkhatib, Mohammad Alia, Adnan Hnaif, Sufian Yousef," A novel method for localising a randomly distributed wireless sensor network", Int J Syst Assur Eng Manag, <https://doi.org/10.1007/s13198-017-0670-0>, 2017. Volume 9, Issue 2, pp 354–361
- 8- Ahmad A.A. Alkhatib, Mohammad Alia and Adnan A. Hnaif, Smart System for Forest Fire Using Sensor Network. International Journal of Security and Its Applications. Vol. 11, No. 7 (2017), pp.1-16 , <http://dx.doi.org/10.14257/ijasia.2017.11.7.01>
- 9- Adnan A. Hnaif, Mohammad A. Alia, "MOBILE PAYMENT METHOD BASED ON PUBLICKEY CRYPTOGRAPHY". International Journal of Computer Networks & Communications (IJCNC), 2015 .
- 10- Abdallah A. Hlayel, Adnan A. Hnaif. A New Exact Pattern Matching Algorithm (WEMA). Journal of Applied Sciences, 14(2): 193-196, ISSN 1812-5654 / DOI:10.3923/jas.2014.193.196 Vol. 14. 2014
- 11- Zeyad Mohammad, Ahmad Abusukhon, Adnan A. Hnaif and Issa S. Al-Otoun, 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, 2017
- 12- Adnan A. Hnaif, "A New Platform NIDS Based on WEMA". International Journal of Information Technology and Computer Science (IJITCS), 2015.
- 13- Abdallah A. Hlayel, Adnan A. Hnaif. An algorithm to improve the performance of string matching. Journal of Information Science, 2014, DOI: 10.1177/0165551513519039, 14 January 2014.
- 14- Hayam K. Al-Anie, Mohammad A. Alia and Adnan A. Hnaif. E-Voting Protocol Based On Public-Key Cryptography. International Journal of Computer Science and Information Technology (IJCSIT). Vol. 3. 2011.
- 15- Mohammad A. Alia, Adnan A. Hnaif, Hayam K. Al-Anie , Khulood Abu Maria, Ahmed M. Manasrah, M. Imran Sarwar, A Novel Header Matching Algorithm for



Intrusion Detection Systems, International Journal of Network Security & Its Applications (IJNSA), Vol.3, No.4, July 2011.

- 16- Mosleh M. Abu Alhaj, M. halaiqah, Muhannad A. Abu hashem, Adnan A. Hnaif, O. Abouabdalla, and Ahmad Manasrah, “An Innovative Platform to Improve the Performance of Exact-String Matching Algorithms”, International Journal of Computer Science and Information Security, 2010.
- 17- Adnan A. Hnaif et al, Parallel Quick Search Algorithm to speed Packet Payload Filtering in NIDS, Journal of Engineering Science and Technology, 2009

### **B. Conference Papers**

- 1- Adnan A. Hnaif, Nagham AL-Madi, Mohammad Abduljawad, Amal Ahmad, “An Intelligent Road Traffic Management System Based on a Human Community Genetic Algorithm”, 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), 978-1-5386-7942-5/19©2019 IEEE
- 2- Nancy Al-ramahi, Adnan A. Hnaif, Khalil Awad, “Advanced Weighted Exact Matching Algorithm (AWEMA)”, 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), 978-1-5386-7942-5/19©2019 IEEE.
- 3- Adnan A. Hnaif. “WEMA to Speed up NIDS Packet Header Detection Engine”, International conference of Advances in Intelligent Systems and Computing, Vol 533, 2016.
- 4- Imad J. Mohamad, Anas F. Bayan, Hussein A. Al bazaar, and Adnan A. Hnaif, “ A New Dynamic-Auto-Static Technique for dhcpv4 IP Address Allocation”, Proceeding of 2009 IEEE International Conference on Antennas, Propagation and Systems (INAS 2009), 3-5, Dec. 2009, Johor, Malaysia.
- 5- Adnan A. Hnaif et al, Parallel Quick Search Algorithm to speed Packet Payload Filtering in NIDS, International conference on Network Applications, Protocols and Services (NetApps, 2008).
- 6- Adnan A. Hnaif and Aman Jantan, A Proposed Method to Speed up the Filtering Packets Header and Save Memory, Prosiding capaian maklumat & Pengurusan Pengetahuan 2008.