### **CURRICULUM VITAE**

### **A: Personal Information**

Name: Dr. Mahmood ul Hassan

Specialization: Computer Science

Highest Degree: Ph.D.

Academic Rank: Assistant Professor

Email: maasghar@nu.edu.sa

#### **B**: Qualifications

Degree	Institute	CGPA	Grade
Ph.D. Computer Science (2015 – 2018)	IIC University of Technology, Kingdom of Cambodia	3.78 / 4	A+
MS / Mphil Computer Science (2007 – 2010)	COMSATS University, Pakistan	3.05 / 4	А
BCS (Hons) Computer Science (2003 – 2006)	HAZARA University, Pakistan	3.63 / 4	А
Hifzul Quran (1994 -1997)	Wifaqul Madarisul Arabia		А

# C: Teaching experience at the university

# 1. PhD Supervisor ( Department of computer Science)

Employer: IIC University of Technology, Department of

Computer Science, Phnom Penh, Kingdom of Cambodia.

Duration: From June, 2018 - till date

#### 2. Assistant Professor

**Employer**: Quality Education Company

**University**: Najran University

**Duration**: From Aug, 2019 – till date



#### 3. Assistant Professor

**Employer**: Quality Education Company

**University**: University College of Alwajh - Tabuk University

**Duration**: From Sep, 2018 – Sep, 2019

### 4. Head of Department (Department of Computer Science)

Employer: Al Jouf University, Saudi Arabia

**Duration**: From 2014 – 2015

### Responsibilities:

- · Academic planning of the department.
- · Quality management and enhancement.
- Research governance.
- Implementation and general overview of processes within the Department to ensure the educational progress and welfare of students registered with the Department.
- Supervise department council meetings.
- Attend college council meetings to portray the departmental activities.

### 5. Lecturer Computer Science

Employer: Al Jouf University, Saudi Arabia

**Duration**: 2010 – 2015

### Responsibilities:

- In-charge of the College Time Table Committee.
- Member of College Examination Committee.
- Member of the Quality Assurance Committee.
- Teaching the subjects of Computer Sciences to the students of undergraduate classes using lecture plans, assignments/projects, group discussions, case studies and seminars/workshops.
- Preparing, administering and marking the tests and papers to evaluate students' progress.
- Preparation of teaching materials and course descriptions.
- Supervising the examinations, field placements of the students for assignments and trainings, workshops and seminars arrangement for the students.
- Advising students on their career decisions.
- Providing views/comments with suggestions for revision and improvement of curriculum and degree requirements.
- Reporting to the Dean on students' progress with recommendations for improving their progress.

### 6. Lecturer Computer Science

Employer: Govt. College of commerce & management

sciences, Pakistan

**Duration:** 2008 – 2010

#### 7. Research Associate

Employer: COMSATS University, Pakistan

**Duration:** 2007 – 2010

#### **D: Publications**

Mahmood ul Hassan, Shahzad Ali, Khalid Mahmood "DEENR vs C3R: A Comparative Analysis of Connectivity Restoration Protocols" 2020 2nd International Conference on Computer and Information Sciences (ICCIS). IEEE, 2020. DOI: 10.1109/ICCIS49240.2020.9257605

2. Muhammad Kashif Saeed, Mahmood ul Hassan "Efficient Solution for Connectivity Restoration (ESCR) in Wireless Sensor and Actor-Networks." Wireless Personal Communications (November, 2020). Impact Factor 1.6

Digital Object Identifier (DOI): <u>https://doi.org/10.1007/s11277-020-07962-3</u>

3. Shah Murtaza Rashid Al Masud, Mahmood ul Hassan " Preemptive Queue Based Modified MAC Superframe for WBSN to Efficiently Transmit Pilgrims' Heterogeneous Data at Ritual Sites: An Analytical Approach", IJCSNS International Journal of Computer Science and Network Security, Vol. 20, No. 10, Nov 2020, ISSN: 1738-7906.

Digital Object Identifier (DOI): 10.22937/IJCSNS.2020.20.10.17

**4.** Shah Murtaza Rashid Al Masud, **Mahmood ul Hassan** " An M/M/1 Preemptive Queue based Priority MAC

Protocol for WBSN to Transmit Pilgrims' Data", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 11, No. 10, Nov 2020, ISSN: 2158-107X.

Digital Object Identifier (DOI): 10.14569/IJACSA.2020.0111023

5. Jahangir khan, Mahmood ul Hassan " A Cluster-Based Mitigation Strategy Against Security Attacks in Wireless Sensor Networks", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 11, No. 9,

Sep 2020, ISSN: 2158-107X.

- 6. Mahmood ul Hassan " Node Relocation Techniques for Wireless Sensor Networks: A Short Survey", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 10, No. 11, ,November 2019, ISSN: 2158-107X.
- Babar Nawaz, Mahmood ul Hassan "Congestion Control Techniques in WSNs: A Review", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 10, No. 4, May 2019, ISSN: 2158-107X.

- 8. Mahmood ul Hassan, Shahzad Ali, Khalid Mahmood "Genetic Algorithm VS Simulated Evolution: A Comparative Study of Evolutionary Optimization Techniques for Object Recognition" 2019 International Conference on Computer and Information Sciences (ICCIS). IEEE, 2019.
- Shahzad Ali, Mahmood ul Hassan "Investigation on communication aspects of multiple swarm networked robotics", TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, ELK-1710-260, 19<sup>th</sup> January 2019.

#### Doi: 10.3906/elk-1710-260, IF 1.0

- **10. Mahmood ul Hassan** " Connectivity Restoration Techniques for Wireless Sensor and Actor Network (WSAN), A Review", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 9, No. 9, Sep 2018, ISSN: 2158-107X, **IF 1.324**
- Khalid Mahmood, Mahmood ul Hassan "Intelligent On-Demand Connectivity Restoration for Wireless Sensor Networks", Hindawi Wireless Communications and Mobile Computing, Volume 23-05-2018, IF 1.8
- 12. Mahmood ul Hassan " Distributed Energy Efficient Node Relocation Algorithm (DEENR)", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 9, No. 03, April 2018, ISSN: 2158-107X, IF 1.324
- **13.** Khalid Mahmood, Muhammad Amir Khan, **Mahmood ul Hassan** "Permanent Relocation and Self-Route Recovery in Wireless Sensor and Actor Networks", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 9, No. 03, April 2018.
- **14.** Jahangir Khan, Khalid Mahmood, **Mahmood ul Hassan** "Coverage-Aware Protocols in Wireless Sensor Networks: A Review", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 9, No. 11, Nov 2018.
- 15. Ansar Munir Shah, Abdelzahir, Khalid Mahmood, Mahmood ul Hassan" e-Health WBAN: Energy-Efficient and Priority-Based Enhanced IEEE802.15.6 CSMA/CA MAC Protocol", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 9, No. 04, ,May 2018.
- **16. Mahmood ul Hassan** " Analysis of IPv4 vs IPv6 Traffic in US ", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 7, No. 12, UK, Dec 2016-17.
- 17. Mahmood ul Hassan " A Review on Wireless Sensor Networks: An Application Perspective", International Journal of Computer Science and Information Security (IJCSIS), USA, Nov 2016
- 18. Mahmood ul Hassan " A Connectivity Restoration in Partitioned Wireless Sensor Networks: A Review", International Journal of Computer Science and Information Security (IJCSIS), USA, Nov 2016
- **19. Mahmood ul Hassan** "Object Recognition using Moment descriptors and Genetic Algorithm", International Journal of Advanced Research in Computer Science & Technology (IJARCST 2015), Vol 03, Issue 1, (Jan-March 2015), pp. 78-84, ISSN: 2347-8446
- **20. Mahmood ul Hassan** "Object Recognition using Particle Swarm Optimization (PSO) and Genetic Algorithm", International Journal of Computer Science Issues (IJCSI), Vol 10, Issue 5,

- 21. M. Umar Khan, Mahmood ul Hassan, Abdel Rehman Osman, Imad Siraj "Evaluating and Modeling Proactive Routing Protocols with Route Stabilities using 802.11eEDCF", IOSR Journal of Computer Engineering (IOSRJCE), ISSN: 2278-0661, ISBN: 2278-8727, Volume 8, Issue 2 (Nov-Dec. 2012), pp 46-50, www.iosrjournals.org
- 22. Mubashir Ahmad, Mahmood ul Hassan, Imran Shafi, Abdel Rehman Osman, "Classification of Tumors in Human Brain MRI using Wavelet and Support Vector Machine", IOSR Journal of Computer Engineering (IOSRJCE), ISSN: 2278-0661, ISBN: 2278-8727, Volume 8, Issue 2 (Nov-Dec. 2012), pp 25-31, www.iosrjournals.org
- 23. Mahmood ul Hassan, , "أهمية الخوارزميات الجينية في التعرف على الكائنات", special edition of Arab Computer Society Communications, pp, 89- 101, Special Issue February 2013, King Fahd University of Petroleum and Minerals, Kingdom of Saudi Arabia

#### http://www.arabcomputersociety.org/comm/139-588-1-PB628b.pdf

- 24. Nazir Iqbal, Mahmood ul Hassan, Adel Rehman Osman, Mubashir, "A framework for partial implementation of PSP in Extreme programming", International Journal of Engineering Research and Applications (IJERA), ISSN: 2248-9622, Vol. 3, Issue 2, March-April 2013, pp. 604-607
- 25. Mubashir Ahmad, Mahmood ul Hassan, AbdelRahman Osman, Muhammad Anwar "How to Resolve Management Issues in Software Development", International Journal of Computer Science Issues (IJCSI), Vol. 10, Issue 2, March 2013, ISSN(Print) 1694-0814, ISSN(Online) 1694-0784.www.IJCSI.org
- **26. Mahmood ul Hassan**, "Scrutiny of Reactive Routing Protocols under different scalabilities using 802.11 and 802.11e", International Journal of Technology Research (IJTNR), vol 1, No 2, June 2013
- **27. Mahmood ul Hassan**, Dr Muhammad Sarfraz, Dr Muhammad Abdel Rehman, "Comparative study of evolutionary optimization technique (Genetic Algorithm) and Fourier Descriptors in object recognition", 1st Taibah university international conference on computing and information technology", 2012 2013
- **28.** M. Sarfaraz, **Mehmood-ul-Hassan**, M.Iqbal "Object Recognition using Fourier Descriptors and Genetic Algorithm" socpar, pp. 318-323, International Conference of Soft Computing and Pattern Recognition, 2009.
- **29.** Ahmad, N, Malik, **ul Hassan, Mahmood**, Qureshi, M.S Munir, A "Reducing user latency in web prefetching using integrated techniques", Computer Networks and Information Technology (ICCNIT), 2011 IEEE CONFERENCE.
- **30.** Abdelrehman, **Mahmood ul Hassan**, "معامل افتراضية باستخدام المحاكاة" International Conference on Computer Science and Engineering in Arabic Eighth Session, 26-28 December 2012.

#### **E:** Committees

Name of Committee	Role	Session	
وحدة المشاركة المجتمعية و البحث العلمي	Member	2020 - 2021	
لجنة التعليم والتعلم	Member	2020 - 2021	
لجنة تظلمات قسم الحاسب	Member	2020 - 2021	

### F: Community Service

• Member of Community Service Committee

### **G**: Courses taught

- Operating System
- Database
- Computer Networks
- Artificial Intelligence
- Parallel Processing
- Computer Skills
- Introduction to Computer
- Anaylis of algorithms

# H: Membership of scientific societies

 Member of Editorial board of "International Journal of Sensors and Sensor Networks (IJSSN)".

## **I: Training Courses**

CCNA

## J: Conferences, workshops and symposia

 Participated in "2020 2nd International Conference on Computer and Information Sciences (ICCIS)" Jouf University, Saudi Arabia by IEEE,
 2020

- Participated in "2020 Ist International Conference on Computer and Information Sciences (ICCIS)", Jouf University, Saudi Arabia by IEEE,
   2019
- Participated in a one day workshop with title of "computer maintenance" at Najran University, Computer skills department, Saudi Arabia, 17-10-2019
- Participated in a one day seminar with title of "Strategies for writing a good research article" at Tabuk University, Al-Wajh, Saudi Arabia, 28-2-2019
- Participated in a one day seminar with title of "Impact of evolutionary optimization techniques in Object recognition" at Tabuk University, Al-Wajh, Saudi Arabia, 12-2-2019
- Participated in a one day seminar with title of "Importance of computer languages for the implementation of graduation project" at Al Jouf University, College of Science & Arts, Tabarjal, Saudi Arabia, 2015
- Participated in 1 days training workshop on "Qualification requirements for applying for institutional accreditation for higher education institutions" at at Al Jouf University, College of Science & Arts, Tabarjal, Saudi Arabia, 2015
- Participated in 1 days training workshop on "Self-assessment scales" at at Al Jouf University, College of Science & Arts, Tabarjal, Saudi Arabia, 2015.
- Participated in 1 days training workshop on "Program Description and course specification" at Al Jouf University, College of Science & Arts, Tabarjal, Saudi Arabia, 2015.
- Participated in 3 days International Workshop on Frontiers of Information Technology (FIT) at Serena Islamabad held on December 21-23, 2010.