

## CURRICULUM VITAE



**Name** : Mahmood Khalel Ibrahim  
**Sex** : Male  
**Nationality** : Iraqi  
**Religion** : Muslem  
**Birthday** : 1/7/1953  
**Degree** : Professor  
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### QUALIFICATION

1. **B. Sc.** Physics, College of Science, University of Baghdad, 1974.
2. **Post. Diploma**, Computer Programming and Microprocessor Applications, Department of Computer Science, University of Essex, U. K. 1983.
3. **M. Sc.** Computer Science, Department of Computer Science, University of Essex, U. K. 1984, (Thesis: A Polymorphic Preprocessor for Pascal).
4. **Ph. D.** Computer Science and Information Systems, University of Technology, Baghdad, 2000, (Thesis: Black-Box Attack Using Neuro-Identifier).
5. **Specialization:** Information & Networks Security.

### EMPLOYMENT HISTORY

January 2019- present: Lecturer – Department of Systems Engineering.

- January 2018 – Sept. 2018: Acting Dean , College of Information Engineering, Al-Nahrain University, Baghdad, Iraq.
- Oct., 2014 – Jan. 2019: Deputy Dean (Academic), College of Information Engineering, Al-Nahrain University, Baghdad, Iraq.
- Sept., 2013 – sept. 2014: Head, Dept. Of Internet Engineering, College of Information Engineering, Al-Nahrain University, Baghdad, Iraq.
- Dec., 2009 – Sept., 2013: Deputy Dean (Academic), College of Information Engineering, Al-Nahrain University, Baghdad, Iraq.
- Jan., 2009 – Nov., 2009 : Lecturer, College of Information Engineering, Al-Nahrain University, Baghdad, Iraq.
- 2006 - 2008: Assistant Professor, College of Computing & Information Technology, Sohar University – Sohar, Oman.
- 2005 – 2006: Deputy Dean, College of Computing, Al Ghurair University, Dubai, UAE

- 2004- 2006: Assistant Professor, College of Computing, Al Ghuair University, Dubai, UAE.
- 2000-2003: Assistant Professor, Dept. of Computer Science, University of Technology.
- 1997-2000: Ph. D. student at the University of Technology – Iraq, Part time lecturer.

## TEACHING EXPERIENCE

Year	Subject	University/College
1 2009 – Present	<ul style="list-style-type: none"> <li>• Information Security (M Sc)</li> <li>• Adv. Info. &amp; Networks Security (Ph. D.)</li> <li>• Modern Algebra</li> <li>• Cryptography</li> <li>• Project Management</li> <li>• Software Engineering (M Sc)</li> <li>• Information Systems Security (M. Sc.)</li> <li>• Discrete Mathematics</li> <li>• Soft Computing (M Sc)</li> <li>• Networks Security</li> <li>• Advanced Network security (M. Sc)</li> <li>• Internet &amp; Web Security</li> <li>• Artificial Intelligence</li> <li>• Intelligent Systems</li> </ul>	Al-Nahrain University – College of Information Engineering - Iraq
2 2006 / 2008	<ul style="list-style-type: none"> <li>• Management Information Systems</li> <li>• Principles of Artificial Intelligence</li> <li>• Information Security</li> <li>• Machine Learning</li> <li>• Software Project Management</li> </ul>	Sohar University – Oman
3 2004/2006	<ul style="list-style-type: none"> <li>• Management Information Systems</li> <li>• Fundamentals of Information systems</li> <li>• Computer and Networks Security</li> <li>• Data Structures and Algorithm analysis</li> <li>• Decision Science</li> <li>• Business information systems</li> </ul>	Al Gurair University – Dubai
4 1999/2003	<ul style="list-style-type: none"> <li>• Information security and cryptography</li> <li>• Advance Cryptography and Cryptanalysis</li> <li>• Structure programming using Pascal</li> </ul>	University of Technology – Iraq
	<ul style="list-style-type: none"> <li>• Networks Security</li> <li>• Data structure and Algorithms</li> <li>• Artificial Intelligence</li> </ul>	Institute Of Informatics For Higher Education – Iraq
5 1998/1999	<ul style="list-style-type: none"> <li>• Discrete Mathematics</li> <li>• Computation theory</li> </ul>	Al-Yarmouk University College – Iraq

## RESEARCHES:

1. Abdalkahik W. Hussain, Mahmood K. Ibrahim, Unified Security Protocol for Wireless Sensor Networks”, International Journal of Enhanced Research in Science, Technology & Engineering, Vol. 8 Issue 3, March -2019.
2. Mahmood Khalel Ibrahim, ” Integrated Security Services Suit IS3”, SCCS 2019, March 2019.

3. Amer A. Abdulrahman & Mahmood K. Ibrahim, "Evaluation of DDoS Attacks Detection in a New Intrusion Dataset Based on Classification Algorithms", IJICT Vol. 1, Issue 3, Nov. 2018.
4. Mahmood K. Ibrahim, Laith Abdulhusein Hamood, "Video Encryption Based on Chaotic System and Stream Cipher", Iraqi Journal of Information and communications Technology, 1, 2, June 2018.
5. Mahmood K. Ibrahim and Hussein Ali Kassim, " Perfect Secrecy System Based On Chaotic Key Generator", Iraqi Journal of Information and communications Technology, 1, 2, June 2018.
6. Mahmood K. Ibrahim Alaa S. Sadiq, " Integrated Biometric DNA Identification System", Iraqi Journal of Information and communications Technology, 1, 1, April 2018.
7. Mahmood K. Ibrahim and Muntasser S. Falih, "Biometric National Identification Number Generation for Secure Network Authentication Based Fingerprint", Journal of Fundamental and Applied Sciences, 2018, 10(6S), 2018, 10(6S), 198-202.
8. Mahmood K. Ibrahim and Hussein Ali Kassim, "VoIP Speech Encryption System Using Stream Cipher with Chaotic Key Generator", Journal of Fundamental and Applied Sciences, 2018, 10(6S), 204-210.
9. Mahmood K. Ibrahim and Hussein Ali Kassim, "Implementation of VoIP Speech Encryption System Using Stream Cipher with Lorenz map Key Generator", International Journal of Scientific & Engineering Research, Volume 8, Issue 7 , July 2017.
10. Fatima Aziz Rawdhan, Mahmood Khalel Ibrahim, " Enhancement of Email Security Services", International Journal of Scientific & Engineering Research, Volume 8, Issue 1, January-2017, Pp:2090-2098
11. Mahmood K. Ibrahim, "Integrated Security Protocol for Electronic Election System", Information Engineering & Applications, Vol. 7, No. 1, 2017.
12. Mahmood K. Ibrahim, "Enhanced E-mail Security Protocol Based on Hybrid Cryptographic Systems", International Journal of Enhanced Research in Science, Technology & engineering, Vol. 5 Issue 3, March-2016.
13. Mahmood K. Ibrahim, "Robust Electronic Voting System Using Homomorphic Encryption Protocol and Zero-Knowledge Proof", International Journal of Enhanced Research in Science, Technology & Engineering (IJERSTE), 91-100, Vol. 5 Issue 1, January-2016.
14. Mahmood K. Ibrahim & Osama Hussain Malik, "Security as A Service Model for Cloud Computing", International Journal of Enhanced Research in Science, Technology & Engineering (IJERSTE), Vol. 4 Issue 11, November-2015.
15. Mahmood K. Ibrahim and abdulkhaliq Wathah, "An Efficient Pairwise and Group Key Management Scheme For Wireless Sensor Network", International Journal of Enhanced Research in Science Technology & Engineering, Vol. 4 Issue 1, January-2015, pp: (25-31).
16. Mahmood K. Ibrahim and Wasan Zaki Ameen, "Secure SMS System for E-Commerce Applications", International Journal of Computer Science Engineering and Technology (IJCSSET), April 2014, Vol 4, Issue 4, 137-142.
17. Mahmood K. Ibrahim and Tamara Alaa Mohammed Ali, "Secure Messaging System using ZKP", IJCSET, November 2013, Vol 3, Issue 11, 388-393.
18. Mahmood K. Ibrahim and Mohammed A. Jabbar Hamed, "Secure E-Government Framework: Design and Implementation", IJCEST, Vol. 3 Issue 5, pp:186-193, May 2013. Mahmood K. Ibrahim, "Electronic Enterprise Management", The Impact of Informion & Communication on the Future of E-Government in Iraq", College of Information Engineering, 6th March, 2012.
19. Mahmood K. Ibrahim, "Modification of Diffie-Hellman Key Exchange Algorithm for Zero Knowledge Proof", 1st International Conference on Future Communication Networks, ICFCN'12, Baghdad, 10-12 April, IEEE ISBN: 978-1-4673-0259-3, Engineering & Technology Journal, Vol. 30, No. 3, 2012.
20. Mahmood K. Ibrahim, "GSM Encryption Algorithm Emulation Using Neuro-Identifire", Al-Nahrain Journal for Science, Vol. 15, No. 3, September 2012.

21. Mahmood K. Ibrahim, "Information Warfare: Future Trends", Informatic Crimes under Information & Communication Technology development", College of Information Engineering, 10th March, 2011.
22. Mahmood K. Ibrahim. & Samar Taha, "Decision Support System for Network Routing Optimization Problem", Kufa Journal for Maths and Computer Science, April 2011,
23. Mahmood K. Ibrahim, "GSM Security: Threats And Challenges", ETEC08, Oman, 14-15 April, 2008.
24. Mahmood K. Ibrahim, "Black-Box Attack using Neuro-Identifier", Cryptologia, Vol. 28, No. 4, October 2004.
25. Mahmood K. Ibrahim, "Black-Box Attack using Fuzzy-Neuro Identifier", ICTIT/IEEE 2004, Amman, 22-24 September, 2004.
26. Mahmood K. Ibrahim, "Construction Of Logic Networks Using Artificial Neural Networks", 2nd Scientific conference, Dept. of Computer Science and Information Systems, University of Technology, March 2003.
27. Mahmood K. Ibrahim, "An Introduction to Computer Viruses", 1st Scientific Conference, Dept. of Computer Science and Information Systems, University of Technology, April 2002.
28. Mahmood K. Ibrahim, "Information Security and Safeguarding", 1st Scientific Conference, Dept. of Computer Science and Information Systems, University of Technology, April 2002.
29. Mahmood K. Ibrahim, Al Bayaty, Hilal Y., "Affine and Traditional Vegenere Algorithms", Federation of Arab Scientific Research Councils, Computer Researches, Vol. 5 No. 1, 2001.
30. Mahmood K. Ibrahim, "Non-linear system Identification using Artificial Neural Networks", Computers Magazine, NCC, No. 37, 2000.
31. Mahmood K. Ibrahim, "Introduction to Artificial Neural Networks", Federation of Arab Scientific Research Councils, Computer Researches, Vol. 4 No. 1, 2000.

## BOOKS

Mobile & Tablets Technology, Textbook for industrial Secondary Schools, 2016

## UNDERGRADUATE & POSTGRADUATE SUPERVISION

### 1. B. Sc Graduation Projects

- 8 students – University of Technology (2000 – 2003)
- 3 students – Al Ghurair University (2004 – 2005)
- 13 students – Sohar University (2006 – 2007)
- 22 students – Al-Nahrain University, College of Information Engineering (2009 – 2019)

### 2. Post Diploma supervision

- 2 students - University of Technology (2000 – 2003)
- 11 Students - Institute Of Informatics For Higher Education (2000-2003)
- 2 students Ministry of Interior

### 3. M.Sc. & Ph. D. Supervision

Seq.	Title of Project	Date	
		From	To
1.	Black-Box Attack Using Fuzzy-Neuro Identifier	Oct. 2000	Jan. 2001
2.	Block Cipher Cryptanalysis Using Neural Networks	Oct. 2001	May 2003
3.	Geographical Information Extraction From Digital Images	Oct. 2001	July 2003
4.	Decision Support System for Routing Optimization Problem	Nov. 2009	Jan. 2011
5.	Combined Zero Knowledge Proof and Homomorphic Encryption Voting	Nov. 2010	July 2012
6.	Security Management Framework for Registry System Operating Environment	Nov. 2011	July 2013

7.	A Simple Web Security Framework Based on ZKP	Nov. 2011	July 2013
8.	Secure SMS System for E-Commerce	Nov. 2012	May 2014
9.	A Secure Routing Protocol for MANET	Nov. 2012	June 2014
10.	Unified Security Protocol for Wireless Sensor Networks	Oct. 2013	April 2015
11.	Secure Network Authentication based on Biometric National ID	Oct. 2014	May 2016
12.	Security as Service Model for Cloud Computing	Oct. 2014	April 2016
13.	A Secure Scheme to Analyze and Shield an Online Social Network Against Threats	Oct. 2014	June 2016
14.	Analysis and improvement of E-mail security Services	Oct. 2015	April 2017
15.	VOIP Speech Encryption System Using Stream Cipher with Chaotic Key Generator	Aug. 2016	Oct. 2017
16.	Biometric Identification System Based on DNA Database	Oct. 2016	April 2018
17.	Video Encryption Scheme Based on Chaotic System	Sep. 2017	
18.	Homomorphic Encryption Security Model for Cloud Computing System - PHD	July. 2017	July 2019
19.	Construction of Robust Intrusion Prevention System Based on Online Machine Learning Algorithms- PHD	April 2018	April 2020
20.	Information Security Service Based on DNA Cryptography	Nov. 2017	Apr. 2019
21.	Simplified Security Model for Internet of Things Applications	Nov. 2018	Nov. 2019

## LANGUAGES

Arabic, English

## SERVICE WITHIN THE FACULTY AND THE UNIVERSITY

Dates	Description of Role
2018-	Acting Dean, Al-Nahrain University, College of Information Engineering
2014-present	Academic Deputy Dean, Al-Nahrain University, College of Information Engineering
2013-2014	Head, Dept. of Internet Engineering, Al-Nahrain University, College of Information Engineering
2010-1013	Academic Deputy Dean, Al-Nahrain University, College of Information Engineering
2010-present	Member of College Board - Al-Nahrain University, College of Information Engineering
2009-present	Member of Scientific Committee - Al-Nahrain University, College of Information Engineering
2009-present	Member of Curriculum Development committee - Al-Nahrain University, College of Information Engineering
2009-2011	Chairman of Examination Committee - Al-Nahrain University, College of Information Engineering
2009-2012	Member of Quality Assurance Board – Al-Nahrain University
2006-2008	Member of Quality Assurance Committee – Sohar University – Oman
2008-	Member of Academic Board - Sohar University – Oman
2006-2008	Member of Teaching and Learning Committee – University level + Faculty level - Sohar University – Oman
2006-2008	Chairman of Examination Committee of the faculty - Sohar University – Oman
2006-2007	Level 4 students academic advisor - Sohar University – Oman
2006	Curriculum review and update of currently running streams

## ACADEMIC ACTIVITIES

Dates	Description of Role
2018	Member of editorial board of Iraqi Journal of Info. & Comm. Technology
2018	Review of academic programs
2016	Participation with College board in establishing and coordination links with government organization
2015	Preparation of College Handbook
2014	Participating in academic programs revision
2013	Development of new program (systems Engineering)
2011	Participating in preparation stage of ABET accreditation program.
2010	Development of examination handbook- Al-NahrainUniversity, College of Information Engineering
2010	Development of Academic standard - Al-NahrainUniversity, College of Information Engineering
2010	Development of Academic Handbook - Al-NahrainUniversity, College of Information Engineering
2009	Development and implementation of Course portfolio - Al-NahrainUniversity, College of Information Engineering
2007-2008	Development and review of new stream (Management Information Technology) - Sohar University – Oman
2006-2007	Preparation and review of specialization project regulations and evaluation rules - Sohar University – Oman
2006-2007	Faculty strategic plan development and review - Sohar University – Oman
2006-2007	Development and review of new stream (Networking and database administration) - Sohar University – Oman
2006	Development of academic advising system - Sohar University – Oman
2006	Preparation and review of postgraduate studies regulations and rules - Sohar University – Oman
2004-2005	Deputy Dean – Alghurair University