

# CV Dr. Ahmed Baba Elmadani



**Name :** Ahmed Baba Elmadani Ali, born in Ghat, Libya on 19<sup>th</sup> September 1956.

## **Obtained Degrees:**

1. Bachelor of Science Degree (B.Sc.) in computer science from department of computer faculty of science Sebha University Libya in July 1988.
2. Master of Science Degree (M.Sc.) in electrical and computer engineering from department of electronics and information technology faculty of electrical and electronics Warsaw University of Technology Poland in July 1995.
3. Doctoral of philosophy Degree ( Ph. D.) in Multi Media and Information Technology entitled "Secure Access to Authorized Resources Based on Fingerprint Authentication" from department of electronics faculty of engineering University Pertanian Malaysia (UPM), Malaysia in 23<sup>rd</sup> June 2003.

**Currently :** Associate Prof. since 08.2013

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## **Work Experience :**

1. Tutor from 1988 – 1993 at computer department faculty of science Sebha University, Libya.
2. Assistant Lecturer from 1995 – 1999 and head of computer department faculty of science Sebha University, Libya.
3. Secretary of Manpower Region of Ghat Libya March 2004 - April 2009
4. Lecturer from Oct 2004 – till now at computer department faculty of science Sebha University, Libya.
5. As Vice Dean of the Faculty of Science Sebha University Libya Mar. 2012 – Sep. 2013.
6. Manger of examination office faculty of science since 3/2014.
7. Visited more than twenty countries.

## **Teaching Courses:**

1. Computer Networks,
2. Data Structure,
3. Digital Logic Design
4. Network Security,
5. Compiler,
6. Object Oriented Programming (OOP) in C++,
7. Advanced Computer Networks.

## Researches and Interests

Computer Network, Network Security, Authentication, Digital Signature, Biometrics, Fingerprint, Digital image, eGovernment and Administrative development.

### Projects “under graduate student projects were supervised by me”

1. Sebha University Library.
2. Sebha Regional ninth level final exam
3. Modeling Logical Circuit
4. Work research registry in Manpower
5. Compression study, RSA against Elgaml and other security algorithms
6. Face matching and recognition
7. Teaching courses via Internet
8. Sebha citizen recording system
9. Sebha University Student record.
10. Digital Signature
11. Message hiding within an image.
12. Factorizing big prime numbers using image
13. Student project recording system
14. Sebha University Staff activity record.
15. Farming file system in Sebha region
16. First semester student record system
17. GPS system for Sebha tourist localizations.
18. Sebha University post graduate registration system.
19. Sebha Trade system.
20. Google earth of Sebha City
21. Using a Hand phone to activate PC at home

### Projects “postgraduate student thesis were supervised by me”

1. Offline Signature Verification using Image Processing, Abdulkream Ibrahim “عبدالكريم إبراهيم ابو غفة” 2015-2016 .
2. Implementation of software defined networks in wireless environments “ ” 2016- 2017.

### Activities

1. Participating in an egovernment workshop "Government services via Internet" supervised by Libyan government on 29/9-4/10/2012 held at Holyday Inn Hotel. Cairo Egypt.
2. Participating in an egovernment workshop "overview Libya's egovernment " supervised by Libyan government on 13/11/2012 held at Wadan Hotel. Tripoli Libya.
3. Member of ICIT Tunisia committee since 2012
4. Member of CCIS Arab Universities committee since 2013.

### Conferences papers

1. Ahmed B. Elmadani .(1990). Computer Aids in Education “ ” التعليم . Proceedings of International Symposium Education and Computer. Tripoli Libya.

2. Ahmed B. Elmadani, Veeraraghavan Prakash and Abd R. Ramli. (2001). Application of Smartcard & Secure Coprocessor, BICET 2001 conference Brunei Darussalam.
3. Ahmed B. Elmadani. (2001). Smart card and Secure Coprocessor SCSC enhance Security and Privacy for Internet Services, Proceedings of Engineering Research Conference and Exhibition, UPM, 2-3<sup>rd</sup> October 2001 (UPM2001). Pp. 35-44. KL. Malaysia.
4. Ahmed B. Elmadani, Veeraraghavan Prakash and Abd R. Ramli. (2002) Fingerprint Matching Based on Image rotation and Histogram, proceedings of first International Conference Biometric Technology BIOTEC2002 Conference. Vol. no 1. Pp 1-4. Bangkok Thailand.
5. Ahmed B. Elmadani, Veeraraghavan Prakash, Borhanuddin Mohd. Ali Abd R. Ramli, and Kasmiran Jumari. (2002). Security Enhancement using Fingerprint and Secure Coprocessor. Proceedings of the 2<sup>nd</sup> world Engineering Congress Sarawak WEC2002 Malaysia. Vol. pp 251-355.
6. Elmadani A. B. Prakash, V. Borhanuddin M. A, Jantan A, and Jumari K. (2003). Fingerprint Matching Based on Area under the Highest Peaks Curve, proceedings of the 9<sup>th</sup> ASIA-PACIFIC APCC 2003 Conference Penang Malaysia.
7. Ahmed B. Elmadani, Veeraraghavan Prakash, Borhanuddin Mohd. Ali Abd R. Ramli, and Kasmiran Jumari. (2003). A New Method for Securing Transaction of Sensitive Information on The Web. Proceedings' of the 3<sup>rd</sup> International Conference on Advances in Strategic Technologies ICAST 2003. KL Malaysia. Vol. II. Pp. 671-676.
8. Elmadani AB and Ramli. AR (2010). Matching fingerface Based on Area Under The Highest Peaks Curve. Proceedings ICCE10 Conference. Pp. 379-383. KL Malaysia. ISBN: 978-1-4244-6235-3/10\$26.00c2010 IEEE.
9. Elmadani AB. (2010). Human Authentication using FingerIris Algorithm Based on Statistical Approach, Proceedings NDT2010 conference. Part 1.. Pp. 288-296. Prague Czech Republic. CCIS 87 C Springer 2010.
10. Elmadani AB. (2010). Highly Secure Authentication for ATM Transactions (postal). Proceedings of Faculty of Electronics. Benwalid. Libya.
11. Elmadani AB. (2012). Digital Signature forming and keys protected based on person's Characteristics. Proceedings of International ICITeS' 2012. Vol. No. pp. Tunisia.
12. Elmadani AB. (2012). Document Signing based on anti spoofing biometric(Face) keys. Proceedings of The International Conference on Computing, Networking and Digital Technologies (ICCNDT 2012). Vol. 1. No. 1. pp 134-141. Gulf University, Bahrain. ISBN:978-0-9853483-2-82@2012 SDIWC.
13. Elmadani AB. (2013). Multiple layers security in protecting Arabic-unicode sensitive information based on stenography and cryptographic algorithms. Proceedings of The Second International Conference on Informatics & Applications (ICIA2013). Vol. No. 1. Pp 19-23. Lodz Poland. ISBN: 978-1-4673-5255-0 ©2013 IEEE.
14. Elmadani AB. (2014). Computer as an aid to the farmer for right decision in keeping fruit trees and others in the farming area south Libya. Proceedings of international conference on software engineering and new technologies (ICSENT'14). Tunisia.

15. Ahmed B. Elmadani .(2016). AVL Tree AN Efficient Retrieval Engine IN Classified Fingerprint Database. Proceedings of *International Arab Conference on Information Technology (ACIT'2016)* Vol: 1. Issue: 1.

### Journal papers

1. Ahmed B. Elmadani, Veeraraghavan Prakash and Abd R. Ramli. (2002). Smartcard and Secure Coprocessor enhance Internet Security. Suranaree Journal of Science and Technology. vol. 9. No. 2. Pp 93-97.
2. Ahmed B. Elmadani, Veeraraghavan Prakash, Borhanuddin Mohd. Ali Abd R. Ramli, and Kasmiran Jumari. (2002). Fingerprint Smart Cards as Alternative for ATM Authentication, Suranaree Journal of Science and Technology, Vol. 9 No. 4. Pp 231-237.
3. Ahmed B. Elmadani. (2003) Veeraraghavan Prakash, Borhanuddin Mohd Ali, Abd Rahman Ramli and Kasmiran Jumari, Fingerprint Access Control with Anti-spoofing Technique, Brunei Darussalam Journal of Technology and Commerce, Vol. 3, No. 1, pp. 42-46.
4. Ahmed B. Elmadani and Veeraraghavan Prakash.(2005). New Method for Authenticating Bluetooth Users In Ad Hoc Networks Applied Science Journal Sebha University Libya. Vol.4. no. 1. pp 114-126.
5. Ahmed B. Elmadani, Veeraraghavan Prakash, Borhanuddin Mohd Ali, **Abd Rahman Ramli** and Kasmiran Jumari, Fingerprint Access Control with Anti-spoofing Technique, Brunei Darussalam Journal of Technology and Commerce, Vol. 3, No. 1, pp. 42-46, September 2003.
6. Ahmed B. Elmadani, Veeraraghavan Prakash, Borhanuddin Mohd Ali, Abd Rahman Ramli and Kasmiran Jumari, New Technique in Fingerprint Matching Based on AVL Tree Search Algorithm, Brunei Darussalam Journal of Technology and Commerce, Volume 4, Number 1, January 2006, pp. 48 - 53.
7. Ahmed B Elmadani. (2009). Statistical Approach in Matching Fingerprint Matching based on, Applied Science journal Sebha University. Vol. 8. No. 1. Pp. 42-48.
8. Elmadani AB. (2010). Human Authentication based on Face Image Differences "التحقق من الشخصية باستخدام اختلافات". Journal Sebha University Libya. Vol.10. no. 2. pp 5-10.
9. Ahmed B. Elmadani. (2010). Multimodal Biometric Authentication Algorithm using Fingerprint and Face. Protection, Brunei Darussalam journal of Technology and Commerce. Vol. 5 No. 1. Pp. 41-48.
10. Ahmed B. Elmadani. (2012). Trusted Document Signing based on use of biometric (Face) keys. International Journal of Cyber-Security and Digital Forensics (IJCSDF). 1(4): 289-296. The Society of Digital Information and Wireless Communications (ISSN: 2305-0012).
11. Ahmed B. Elmadani. (2013). Security Layers for Protecting Arabic sensitive Information. Journal of Communication and Computer 10 pp72-81.
12. Ahmed B. Elmadani .(2015). Classification of Fingerprints based on Singular Points "بصمات الأصابع أنواعها وتصنيفها باعتماد النقاط الأساسية للبصمة". Journal Sebha University Libya. Vol.14. no. 1. pp 5-13.
13. Ahmed B. Elmadani .(2016). AVL Tree AN Efficient Retrieval Engine IN Classified Fingerprint Database. International Educational Applied Scientific Research Journal Vol: 1. Issue: 1.

14. Abdulkarim I. Abughfa and Ahmed B. Elmadani. (2016). Statistical Offline Signature Verification Based on Image Processing and Hu Moment. Int. J. Sci. Res. in Network Security and Communication .Vol-4(5), PP (1-7) Oct 2016, E-ISSN: 2321-3256.
15. Ahmed B. Elmadani.(2017). Protected Desktop Access Based on use of Mobile Phone. International Educational Applied Scientific Research Journal Vol: 2. Issue: 1. PP(10-12). Jan 2017. E-ISSN : 2456-5040.

**Expected papers**

1. Elmadani AB. (). PKI keys generation based on use of image(s).
2. Elmadani AB. (). Human Brain as persona identification tool.
3. Elmadani AB. (). Secure remote control based on use of camera and image process
4. Elmadani AB. (). True Currency detection algorithm using Hu Moment