

Sanaa Taha

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Giza, Egypt
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Objective: Curriculum Vitae.

EDUCATION

University of Waterloo, Waterloo, Canada, Ph.D., Securing IP Mobility Management for Vehicular Ad Hoc Networks, 2013

Cairo University, Cairo, Egypt, Pre-doctoral, 2006

Cairo University, Cairo, Egypt, M.A., Performance Evaluation of IP Security, 2005

Cairo University, Cairo, Egypt, Pre-master, 2002

Cairo University, Cairo, Egypt, Bachelor of Computers Majoring in Information Technology, 2001

SPECIAL SKILLS

Computer Programming

PC programming Languages: C, C++, C sharp, Visual C, and Visual Basic.

Internet Programming Languages: HTML, XML, Javascript, ASP, ASP.net.

Database Programming Languages: Microsoft access, Oracle SQL, SQL server.

Network Simulations: OMNET++, Mathlab.

Teaching

8 years of experience as assistant lecturer at faculty of Computers and Information, Cairo university, Cairo, Egypt, in teaching tutorials and labs.

Courses that taught: Microsoft office, Operating systems, Computer digital, data communications, computer Networks, Information Networks, Wireless Networks, Network Security, ISDN, Communication Technology, ICDL, CCNA, Oracle Developer.

Certificates

Certificate of Cisco Course Completion, CCNA 1 Networking Basics.

Certificate of Cisco Course Completion, CCNA 2 Routers and Routing Basics.

Certificate of cisco Course Completion, CCNA 3 Switching Basics and Intermediate Routing.

Certificate of cisco Course Completion, CCNA 4 WAN Technologies.

Certificate of ORACLE university, Oracle Database 10g: Introduction to SQL.

Certificate of ORACLE university, Oracle Database 10g: Program with PL/SQL.

Certificate of ORACLE university, Oracle Database 10g: Build Internet applications.

Certificate of ORACLE university, Oracle Database 10g: Build Reports.

Certificate of International computer Driving Licence, ICDL 4.0.

Computer Experience

Microsoft Office, LaTeX, Visio Imaging, web pages, Programming languages, Matlab charts.

EMPLOYMENT

Assistant Lecturer, Department of Information Technology, Faculty of Computers and Information, Cairo University, Cairo, Egypt. 2005-2008

Teaching Assistant, Department of Information Technology, Faculty of Computers and Information, Cairo University, Cairo, Egypt. 2001-2005

Teaching Assistant, Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, Canada.

Assistant Professor, Department of Information Technology, Faculty of Computers and Information, Cairo University, Cairo, Egypt. 2013-present

PROFESSIONAL AFFILIATIONS

Department of Information Technology, Faculty of Computers and Information, Cairo University, Cairo, Egypt.

Research Experience

I have graduated as a software engineer from the faculty of computers and information, Cairo University, at Egypt. Through my undergraduate study, I learned the basics of programming, networks, information technology and systems, and computer architectures. I challenged myself, as a female, by choosing this field of engineering which requires hard work and much time staying late at computer labs doing programs and simulations. Despite these difficulties, I have been granted the award for academic distinction each year. This award is given for students who achieve a high GPA in each year of undergraduate study. In addition, I had the honor of academic distinction at graduation for achieving a final grade of 85%, which was the 3rd highest grade in my department. After graduation, I have taken other computer-related certificates to increase my knowledge base. These certificates include Oracle database 10g (introduction to SQL, program with PL/SQL, building Internet applications, and building reports), Cisco CCNA1 (networking basics of Cisco networking academy program), Cisco CCNA2 (routers and routing basics), CCNA3 (switching basics and intermediate routing), CCNA4 (WAN technologies), and International Computer Driving Licence (ICDL). Those certificates have enabled me to understand my research interest, i.e. computer networks. In my Master's study, I used what I have learned to propose a security protocol for the IP protocol employed in wired Internet. Also I have gained the experience to build secure protocols using primitive cryptographic algorithms. In my PhD study, I have studied wireless and mobile networks as well as increasing my background in the cryptology discipline; I have also learned many networks simulations such as ns2, OMNET++, and Matlab. After my graduation in 2001 through 2008, I worked as an assistant lecturer at Cairo University; therefore, I became used to managing many tasks simultaneously, what with teaching various courses and preparing labs for students, proctoring and marking exams, all while continuing my research. After successfully finishing my PhD study at University of Waterloo, Canada, I am currently working as assistant professor at Cairo University, Egypt.

PUBLICATIONS

Conference Papers

S. Taha, F. A. Amer, and S. H. Ahmed, "Study Analysis on Multicast Stream Authentication", in proc. of Annual Conference on Statistics, Computer Science and Operation Research, Cairo University, 2004, Pp. 97-117.

S. Taha and X. Shen, " Anonymous home binding update scheme for mobile ipv6 wireless networking," in Proc. of Global Telecommunications Conference (GLOBECOM 2011), 2011 IEEE. 2011, pp. 15.

S. Taha, S. Cespedes and X. Shen, " EM3A: Efficient mutual multi-hop mobile authentication scheme for pmip networks, " in Proc. of IEEE International conference on Communication (ICC 2012). IEEE, 2012.

S. Taha and X. Shen, “ A link-layer authentication and key agreement scheme for mobile public hotspots in NEMO based VANET, ” in *Globe- com 2012 - Communication and Information System Security Symposium (GC12 CISS)*, Anaheim, CA, USA, Dec. 2012.

S. Taha, and X. Shen, “Fake Point Location Privacy Scheme for Mobile Public Hotspots in NEMO based VANETs”, in *Proc. of IEEE ICC’13 conference*, Budapest, Hungary, June 9-13, 2013.

Journal Papers

S. Taha, F. A. Amer, and S. H. Ahmed, A New Proposed Multicast Stream Authentication Technique, *International Journal of Intelligent Computing and Information Science (IJICIS)*, Vol. 4, No. 2, July 2004, Pp. 155-172

S. Taha and X. Shen, “ ALPP: Anonymous and Location Privacy Preserving Scheme for Mobile IPv6 Heterogeneous Networks, ” accepted in 13-July-2012, *Wiley Security and Communication Networks Journal*, Special Issue: Security in Wireless Ad Hoc and Sensor Networks with Advanced QoS Provisioning, DOI: 10.1002/sec.625, early appear, <http://onlinelibrary.wiley.com/doi/10.1002/sec.625/abstract>.

S. Cespedes, **S. Taha**, and X. Shen, “ A Multi-hop Authenticated Proxy Mobile IP Scheme for Asymmetric VANET, ” *IEEE Transactions on Vehicular Technology*, IEEE TVT, VT-2012-01353, accepted, to appear.

S. Taha and X. Shen, “ A Physical Layer Location Privacy Scheme for Mobile Public Hotspots in NEMO based VANET, ” *IEEE Transactions on Intelligent Transportation Systems, ITS*, T-ITS-13-02-0067, accepted, to appear.

S. Taha and X. Shen, “ Security Challenges in IP Mobility Management for Vehicular Networks ”, *IEEE Magazine*, submitted.

M. Mahmoud, **S. Taha**, Jelena Mistic, and X. Shen, “Lightweight Privacy-Preserving and Secure Communication Protocol for Hybrid Ad Hoc Wireless Networks“, *IEEE Transaction on Mobile computing(IEEE TMC)* journal, TMC-2012-10-0503, submitted.

Books and Book Chapters

S. Taha, S. Cespedes and X. Shen, “ Mutual Authentication in IP Mobility-enabled Multi-hop Wireless Networks”, in *Security for Multihop Wireless Networks*, S. Khan, and J. Mauri, Auerbach Publications, Taylor & Francis Group, USA, accepted, to appear.

S. Taha and X. Shen, “ Securing IP Mobility Management for Vehicular Ad Hoc Networks ”, *Springer Brief*, Canada, accepted, to appear.

Conference Presentations

“Study Analysis on Multicast Stream Authentication”, Annual Conference on Statistics, Computer Science and Operation Research, Cairo University, Egypt, Feb. 2004.

“ALPP: Anonymous and Location Privacy Preserving Scheme for Mobile IPv6 Heterogeneous Networks”, Graduate Student Research Conference, university of Waterloo, Monday April 23, 2012, 1:00- 2:20 pm in E5, Room 6008

“ EM3A: Efficient Mutual Multi-hop Mobile Authentication Scheme for PMIP Networks”, *IEEE ICC’12*, Ottawa, Canada, June 10 - 15, 2012. Session: CISS03

“Secure and Efficient Source Location Privacy Preserving Scheme for Wireless Sensor Networks”, *IEEE ICC’12*, Ottawa, Canada, June 10 - 15, 2012, session: CISS11

“A Novel Traffic-Analysis Back Tracing Attack for Locating Source Nodes in Wireless Sensor Networks”, *IEEE ICC’12*, Ottawa, Canada, June 10 - 15, 2012, session: CISS06

“Fake Point Location Privacy Scheme for Mobile Public Hotspots in NEMO based VANETs”, IEEE ICC’13, Budapest, Hungary, June 9-13, 2013, session: CIS-04

“SAFE: A Social Based Updatable Filtering Protocol with Privacy-Preserving in Mobile Social Networks”, IEEE ICC’13, Budapest, Hungary, June 9-13, 2013, session: WN-03