

Omar Hamdy, Ph.D.

Assistant Professor of Instruction
Erik Jonsson School of Engineering and Computer Science
The University of Texas at Dallas
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Education and Academic Degrees

University of Victoria, Victoria, Canada 2010 PhD, Major in Computer Engineering (Biometric Security)
Thesis: HOMOGENEOUS COGNITIVE BASED BIOMETRICS FOR

STATIC AUTHENTICATION

University of Victoria, Victoria, Canada 2000 MSc, Major in Computer Engineering (WAN Networks)

Thesis: ILN Switching Element Design and Performance Measure

Research Focus

My research interest is in the domain of biometric security for statis and dynamic authentication and forensics. In particular, I'm focused on behavioral biometrics, which is still an emerging field of research. I also have research interest in the field of Brain-Computer-Interaction (BCI)

Academic Experience

Adjunct Professor, Feb

2021 - Present

STEM, American Public University

Teaching undergraduate cybersecurity and computer networks

courses.

Adjunct Professor, May

2020 - Present

CS, Florida Institute of Technology

Teaching computer security specialized courses including biometric

security, network security and digital forensics.

Adjunct Professor, Sep

2019 - Present

ITS, University of Cumberlands, KY

Teaching wide range of PhD graduate classes including Enterprise Risk Management, InfoTech strategic planning, Cryptography and

Information Governance.

Adjunct Professor, April

2018 - Jun 2019

CST, UMUC, MD

Teaching different digital security, cybersecurity and digital

forensics graduate classes

Senior Lecturer, May 2010 – Feb 2014 CSE, Helwan University, EGY

Work includes teaching different computer science courses for different academic years including advanced object-oriented programming, operating systems, Human -Computer Interactions, digital security, and others. Also supervise student graduation projects and assist in proposing the undergraduate curriculum.

Program Director, Sep 2010 – Jun 2011 Director of the Faculty Accreditation Program

Work includes planning and managing the long process required for Helwan University, Faculty of Computers and Information to be accredited by the National Authority for Quality Assurance &

Accreditation of Education – EGY

Lecturer, Sep 2010 – Dec 2012

, Sep 2010 – Lecturer, CSE, Future University, EGY

Teaching programming language classes and supervising

graduation projects for the faculty senior students.

Publications

O. Hamdy and I. Traore, "New physiological biometrics based on human cognitive factors," *IEEE International Conference on Complex, Intelligent and Software Intensive Systems*, vol. 0, pp. 910{917, 2009

- O. Hamdy and I. Traore, "Cognitive-based biometrics system for static user authentication," *IEEE International Conference on Internet Monitoring and Protection*, vol. 0, pp. 90{97, 2009.
- O. Hamdy and I. Traore, "Homogenous physio-behavioral visual and mouse based biometrics," *ACM Transactions on Computer and Human Interaction (TOCHI)*, 2010.

Academic Referee

Brent Carrara and Carlisle Adams, "You are the Key: Generating Cryptographic Keys from Voice Biometrics", *IEEE Eighth International Conference on Privacy*, Security and Trust, vol. 0, 2010

Hanul Sieger, Niklas Kirschnick, Sebastian M"oller, "User preferences for biometric authentication methods and graded security on mobile phones", *IEEE Eighth International Conference on Privacy*, Security and Trust, vol. 0, 2010

Pedram Radmand and Alex Talevski, "Impact of Encryption on QoS in VoIP", IEEE Eighth International Conference on Privacy, Security and Trust, vol. 0, 2010

Industrial Experience

I have accomplished a long experience in different industry sectors including government, education, financial, telecommunication and medical sectors. In my 20+ years long industrial experience journey, I worked at different roles, as a consultant, an architect and as a director. My expertise is in emerging technologies, digital transformation, business process management (BPM) and IoT.