Curriculum Vitae (CV)

PERSONAL DETAILS

Name: Ali Hussein Hassan Abu Tahoun

(A. H. Tahoun)

Date of Birth: May 15th, 1976

Gender: Male

Nationality: Egyptian

Place of Birth: Mehalla, Gharbia, Egypt

Marital status: Married and has two children

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EDUCATION

(1982 - 1994)	Primary, Preparatory and Secondary school, Egypt.		
(1994 - 1999)	Bachelor of Science (B.Sc.) degree in Electrical Engineering (Computer and		
	Control Engineering), Tanta University, Egypt, with a graduating general		
	grade of "Very Good with honor grade".		
(2000 - 2005)	Master of Science (M.Sc.) degree in Computers and Control Engineering,		
Tanta University, Egypt. M.Sc. thesis titled "Robust Adaptive C			
	Linear Systems with Bounded Disturbances".		
(2006 - 2009)	Ph.D. in Control Science and Engineering, Huazhong University of science		
	and Technology, P. R. China, Ph.D. dissertation titled "Adaptive Approach		
	to Networked Control Systems".		

EMPLOYMENT

(2000 - 2005)	A Teaching Assistant in the Computers and Control Engineering	
	Department, Faculty of Engineering, Tanta University, Egypt.	
(2005 - 2006)	Assistant Lecturer in the Computers and Control Engineering Department,	
	Faculty of Engineering, Tanta University, Egypt.	
(2009 - 2015)	Lecturer in the Computers and Control Engineering Department, Faculty of	
	Engineering, Tanta University, Egypt.	

(2009-2012)	Microprocessor and process control LAB Manager, Computers and Control		
	Engineering Department, Faculty of Engineering, Tanta University, Egypt.		
(2010- 2012)	Vice Manager – Systems Development Unit (SDU) and MIS Project – Tanta		
	University, Egypt.		
(2012- 2015)	Assistant Professor in Computer Science Department, Faculty of Computer		
	Science & Info Technology, Al-Baha University, Al-Mandaq, Al-Baha,		
	Saudi Arabia.		
(2013- 2020)	Head of Computer Science Department, Faculty of Computer Science &		
	Info Technology, Al-Baha University, Al-Baha, Al-Mandaq, Saudi Arabia.		
(2015- present)	Associate Professor in Computer Science Department, Faculty of Computer		
	Science & Info Technology, Al-Baha University, Al-Mandaq, Al-Baha,		
	Saudi Arabia.		

RESEARCH INTEREST

- Automatic control systems
- Adaptive control
- Networked control systems
- Fault diagnosis
- Robust and fault-tolerant control
- Intelligent control

- Chaotic control systems
- Industrial control
- Neutral and delayed systems
- Multi-agent systems
- Control of cyber-physical systems

PUBLICATIONS

(Total of 27 papers in journals and conferences from 2006 to 2020)

Journal articles:

- 1. **Tahoun A**. **H**., Abouelsoud A. A., Mahmoud M. S, Hassan M. F., and Fahmy M. M. An Approach for Robust SISO Adaptive Control. The Mediterranean Journal of Measurement and Control, 2006, 2 (4): 186–193.
- 2. **Tahoun A**. **H**., Abouelsoud A. A., Mahmoud M. S, Hassan M. F., and Fahmy M. M. Robust Adaptive Control of Linear Multivariable Systems. The Mediterranean Journal of Measurement and Control, 2007, 3 (2): 59–67.
- 3. **Tahoun A**. **H**. and Huajing Fang. Adaptive Stabilization of Networked Control Systems with Network–Induced Delay. The Mediterranean Journal of Measurement and Control, 2007, 3 (4): 183–190.
- 4. **Tahoun A**. **H**. and Huajing Fang. Adaptive Stabilization of Networked Control Systems with Data–Packet Dropout. The Mediterranean Journal of Measurement and Control, 2008, 4 (3): 122–130.
- 5. **Tahoun A**. **H**. Model Reference Adaptive Control of Networked Systems with Network Induced Delays. The Mediterranean Journal of Measurement and Control, 2010, 6 (3): 101–108.
- 6. **Tahoun A**. **H**. and Huajing Fang. Adaptive Stabilization of Networked Control Systems Tolerant to Unknown Actuator Failures. International Journal of Systems Science, 2011, 42 (7): 1155–1164.
- 7. **Tahoun A**. **H**. Model Reference Adaptive Control of Unknown Unified Chaotic Systems. The Mediterranean Journal of Measurement and Control, 2012, 8 (2): 408–412.
- 8. Tahoun A. H. Output-Feedback MRAC of Networked Control Systems with Packet Dropout.

- International Journal of Systems Science, 2013, 44 (9):1701-1710.
- 9. **Tahoun A**. **H**. Robust Adaptive Control Design for Multi-Input Uncertain Chaotic Systems Tolerant to Unknown Actuator Failure, The Mediterranean Journal of Measurement and Control 2013, 9 (4):145–152.
- 10. **Tahoun A**. **H**. Adaptive PID Control for Unknown SISO Chaotic Systems, The Mediterranean Journal of Measurement and Control 2014, 10 (4), 309–315.
- 11. **Tahoun A**. **H**. Adaptive actuator failure compensation design for unknown chaotic multi-input systems, International Journal of Adaptive Control and Signal Processing 2015, 29 (4), 494–504.
- 12. **Tahoun A**. **H**. Adaptive Stabilizer for Chaotic Networked Systems with Network Induced Delays and Packet Losses, Nonlinear dynamics 2015, 81 (1), 823–832.
- 13. **Tahoun A**. **H**. Adaptive Stabilization of Neutral Systems with Nonlinear Perturbations and Mixed Time-Varying Delays, International Journal of Adaptive Control and Signal Processing 2015, 29 (10), 1328–1340.
- 14. **Tahoun A.H.** Anti-windup adaptive PID control design for a class of uncertain chaotic systems with input saturation. ISA Transactions 2017, 66 (January) 176–184.
- 15. **Tahoun A**. **H**. Less-conservative robust adaptive control of neutral systems with mixed time-delays, International Journal of Systems Science 2017, 48 (4) 675–685.
- 16. **Tahoun A**. **H**. New online delay estimation-based robust adaptive control design for multi-input neutral systems with unknown actuator nonlinearities. ISA Transactions 2017, 70 (September) 139–148.
- 17. **Tahoun A**. **H**. Time-varying multiplicative/additive faults compensation in both actuators and sensors simultaneously for nonlinear systems via robust sliding mode control scheme. Journal of the Franklin Institute, 2019, 356 (1) 103–128.
- 18. **Tahoun A**. **H**. Fault-tolerant control for a class of quantised networked control of nonlinear systems with unknown time-varying sensor faults, International Journal of Control, 2020, 93 (3) 619–628.
- 19. **Tahoun A**. **H**. and Arafa M. A new unmatched-disturbances compensation and fault-tolerant control for partially known nonlinear singular systems. ISA Transactions, 2020, 104 (September) 310–320.
- 20. **Tahoun A**. **H**. and Arafa M. Cooperative control for cyber–physical multi-agent networked control systems with unknown false data-injection and replay cyber-attack. ISA Transactions, 2021, 110 (April) 1–14.
- 21. **Tahoun A**. **H**. and Arafa M. Secure control design for nonlinear cyber–physical systems under DoS, replay, and deception cyber–attacks with multiple transmission channels. ISA Transactions, 2022, 128–Part B (September) 294–308.
- 22. **Tahoun A**. **H**. and Arafa M. Adaptive leader-follower control for nonlinear uncertain multi-agent systems with an uncertain leader and unknown tracking paths. ISA Transactions, 2022, **DOI**: 10.1016/j.isatra.2022.04.034
- 23. **Tahoun A**. **H**. and Arafa M. Descriptor-based T–S fuzzy fault-tolerant control for delayed systems with immeasurable premise variables. Applied Intelligence, 2022, **DOI**: 10.1007/s10489-022-04234-4

Conference articles:

1. Tahoun A. H. and Huajing Fang. Adaptive Stabilization of Networked Control Systems with Delays and

- Packet Losses. IEEE International Conference on Networking, Sensing and Control, 26-29 March, Okayama City, Japan, 2009. 71-76.
- 2. **Tahoun A**. **H**. and Huajing Fang. Adaptive Stabilization of Networked Control Systems Tolerant to Actuator Failures. International Conference on Information Technology and Computer Science, 25–26 July, Kiev, Ukraine, 2009. 535–539.
- 3. **Tahoun A**. **H**. and Huajing Fang. Adaptive Stabilization of Networked Control Systems with Delays and State-Dependent Disturbances. 17th IEEE Mediterranean Conference on Control and Automation, MED'09, 24-26 June, Thessaloniki, Greece, 2009. 622-627.
- 4. **Tahoun A**. **H**. and Huajing Fang. Adaptive Actuator Failure Compensation Design for Networked Control Systems with State–Dependent Disturbances. Combined 48th IEEE Conference on Decision and Control and 28th Chinese Control Conference, 16 18 December, Shanghai, China, 2009. 6841–6846.
- Tahoun A. H. Output-Feedback MRAC of Networked Control Systems with Network-Induced Delay. Proc. SPIE 8285, International Conference on Graphic and Image Processing (ICGIP 2011), 1–2 October, Cairo, Egypt, 2011.
- 6. **Tahoun A**. **H**. Output-Feedback MRAC of Networked Systems with Network-Induced Delays and Packet Dropout. The 7th international conference on Computer Engineering & Systems (ICCES'2011), 29 November, to 1 December, Cairo, Egypt, 2011: 91–96.
- 7. **Tahoun A**. **H**. Disturbance Rejection Adaptive Control Design for Multi-Input Chaotic Systems. The 8th international conference on Computer Engineering & Systems (ICCES'2012), 27–29 November, Cairo, Egypt, 2012: 43–48.

REFEREE/REVIEWER (2014 – 2020)

Journal name	Publisher
Asian journal of control,	Wiley
International journal of adaptive control and signal processing,	Wiley
International journal of robust and nonlinear control,	Wiley
ISA Transaction,	Elsevier
Journal of the franklin institute,	Elsevier
Information sciences,	Elsevier
Neurocomputing,	Elsevier
IEEE access,	IEEE Xplore
IEEE/CAA Journal of Automatica Sinica,	IEEE Xplore
IEEE Transactions on Industrial Electronics,	IEEE Xplore
IEEE Transactions on Circuits and Systems I: Regular Papers	IEEE Xplore
IEEE Transactions on Automation Science and Engineering	IEEE Xplore
IEEE Transactions on Systems, Man and Cybernetics: Systems	IEEE Xplore
IET Control Theory & Applications,	IET Digital Library
IET Generation, Transmission & Distribution,	IET Digital Library
IET Cyber-Physical Systems: Theory & Applications	IET Digital Library
Transactions of the Institute of Measurement and Control,	SAGE Journals
Mathematical Problems in Engineering,	Hindawi

Nonlinear dynamics, SCIENCE CHINA Information Sciences International journal of systems science, Springer Springer Taylor & Francis

TEACHING EXPERIENCE

Teaching Lecture Assistant and lecture at Tanta University (Sep. 2000 – to present) for the following courses;

- Introduction to computer
- Logic design
- Signals and systems
- Automatic control systems
- Microprocessor
- Microcontroller
- Digital control
- Computer architecture

- Computer programming C++, Java, Visual Basic
- Programmable logic controller (PLC)
- Digital signal processing (DSP)
- Control and instrumentation of industrial processes
- Computer-controlled systems

Teaching Lecture at Higher Institute of Engineering and Technology – Kafr El-Sheikh (Sep. 2010– to present) for the following courses;

- Digital control
- Computer architecture
- Data structures
- Computer programming C++, Java
- Control and instrumentation of industrial

- processes
- Programmable logic controller (PLC)
- Signals and systems
- Automatic control systems
- Computer-controlled systems

Teaching Lecture at Computer Science Department, Faculty of Computer Science & Info Technology, Al-Baha University, Al-Mandaq/Shahba/Alaqiq, Al-Baha, Saudi Arabia (Dec. 2012– to present) for the following courses;

- Computer architecture
- Data structures
- Algorithms
- Analysis and design of algorithms
- Formal language and automata
- Introduction to computing
- Computer programming (Java)
- Robotics
- Neural Network
- Intelligent systems
- Parallel and distributed computing

- Computer networks
- Computer graphics
- Logic design
- Recommender systems
- Systems integration
- Foundations of information systems
- Foundation of cybersecurity
- Introduction to problem solving and algorithms
- Introduction to information technology and communications

TRAINING PROGRAMS

التاريخ	الجهة المعتمدة	الجهة المنفذة	اسم الدورة		
۲٩	جامعة طنطا	جامعة طنطا	أخلاقيات البحث العلمي		
۲٩	جامعة طنطا	جامعة طنطا	مهارات الاتصال		
۲٩	جامعة طنطا	جامعة طنطا	التخطيط الاستراتيجي		
۲۹	جامعة طنطا	جامعة طنطا	جودة العملية التعليمية		
7.1.	جامعة طنطا	جامعة طنطا	تنظيم المؤتمرات العلمية		
7.1.	جامعة طنطا	جامعة طنطا	التخطيط الاستراتيجي		
۲.۱.	جامعة طنطا	جامعة طنطا	معايير الجودة في العملية التدريسية		
7.11	جامعة طنطا	جامعة طنطا	النشر العلمي		
7.17	جامعة طنطا	جامعة طنطا	مفاهيم وآليات توثيق أنظمة الجودة		
7.15	جامعة الباحة	جامعة الباحة	البحث العلمي ضرورة مجتمعية وريادة مستقبلية		
7.10	جامعة طنطا	جامعة طنطا	نظام الساعات المعتمدة		
7.7.	جامعة الباحة	جامعة الباحة	مفهوم الأمن السييراني		
7.7.	جامعة الباحة	جامعة الباحة	نظام التعليم عن يعد "رافد"		
دورات علمية بعد الحصول على درجة أستاذ مساعد					
7.17	جامعة طنطا	جامعة طنطا	ادارة الفريق البحثي		
7.19	جامعة طنطا	جامعة طنطا	الجوانب المالية والقانونية في الجامعات		
7.19	جامعة طنطا	جامعة طنطا	تظام الساعات المعتمدة		
7.19	جامعة طنطا	جامعة طنطا	تنظيم المؤتمرات العلمية		
7.7.	جامعة طنطا	جامعة طنطا	نظم الاإمتحانات وتقويم الطلاب		
7.7.	جامعة طنطا	جامعة طنطا	إدارة أزمات الكوارث		