

Curriculum Vitae Tamer Zakaria Emara

Feb. 2022

Address: Faculty of Computer Science and Artificial Intelligence, Pharos University in Alexandria, Alexandria, Egypt.

Phone: (+2)01012529348

Email: tamer_emara262@yahoo.com
tamer.emara@pua.edu.eg

Education:

- Ph.D. (2020), Information and Communication Engineering, College of Information Engineering, Shenzhen University, China.
- M.Sc. (2015), Computer Engineering and Control Systems Dept., Faculty of Engineering, Mansoura University, Egypt.
- B.Sc. (2005) Computer and Automatic Control Engineering Dept., Faculty of Engineering, Tanta University, Egypt.

Professional Experience:

Sept. 2021 – till now	Assistant professor at Faculty of Computer Science and Artificial Intelligence, Pharos University in Alexandria, Alexandria, Egypt.
April 2021 – Aug. 2021	Assistant professor at Higher Institute of Engineering and Technology (KFS-HIET), Kafr El-Sheikh, Egypt.
Dec. 2020 – Aug. 2021	Executive manager of Quality Assurance Unit at Higher Institute of Engineering and Technology (KFS-HIET), Kafr El-Sheikh, Egypt.
Jan. 2018 – Dec. 2020	Research fellow at National Engineering Laboratory for Big Data System Computing Technology, Shenzhen University, China.
Sept. 2016 – Dec. 2020	Research fellow at Big Data Institute, Collage of Computer Science and Software Engineering, Shenzhen University, China.
April 2015 – April 2021	Assistant lecturer at Higher Institute of Engineering and Technology (KFS-HIET), Kafr El-Sheikh, Egypt.
Sept. 2007- April 2015	Teaching assistant at Higher Institute of Engineering and Technology (KFS-HIET), Kafr El-Sheikh, Egypt.
Sept. 2006-Aug. 2007	Teaching assistant at Faculty of Engineering, Kafrelsheikh University, Kafr El-Sheikh, Egypt.

Publications:

1. **Tamer Z. Emara**, Joshua Zhexue Huang, “Data distribution strategies to support large-scale data analysis across geo-distributed data centers,” IEEE Access, vol. 8, pp 178526-178538, 2020.
2. Mohammad Sultan Mahmud, Joshua Zhexue Huang, Salman Salloum, **Tamer Z. Emara**, Kuanishbay Sadatdiynov, “A survey of data partitioning and sampling methods to support big data analysis”, Big Data Mining and Analytics, vol. 3, no. 2, pp. 85-101, June 2020.

3. **Tamer Z. Emara**, Joshua Zhexue Huang, “RRPlib: A Spark Library for Representing HDFS Blocks as A Set of Random Sample Data Blocks,” *Science of Computer Programming*, Vol. 184, pp 102301, 2019.
4. **Tamer Z. Emara**, Joshua Zhexue Huang, “A distributed data management system to support large-scale data analysis,” *Journal of systems and software*, Vol. 148, pp 105-115, 2019.
5. Thanh Trinh, Ngoc-Tuan Nguyen, DingMing Wu, Joshua Zhexue Huang, **Tamer Z. Emara**, “A New Location-based Topic Model for Event Attendees Recommendation,” 2019 IEEE RIVF International Conference on Computing & Communication Technologies, Research, Innovation, and Vision for the Future (RIVF), March 20-22, 2019, Danang, Vietnam.
6. **Tamer Emara**, “Adaptive Power Saving Mechanism for VoIP over WiMAX Based on Artificial Neural Network,” *Algorithms, Methods, and Applications in Mobile Computing and Communications*, IGI Global, 2018.
7. Chenghao Wei, Salman Salloum, **Tamer Z. Emara**, Xiaoliang Zhang, Joshua Zhexue Huang, Yulin He, A two-stage data processing algorithm to generate random sample partitions for big data analysis, in: M. Luo, L.-J. Zhang (Eds.), *Cloud Computing - CLOUD 2018, Lecture Notes in Computer Science*, Springer International Publishing, Cham, 2018, pp. 347-364.

Chenghao Wei, Salman Salloum, **Tamer Z. Emara**, Xiaoliang Zhang, Joshua Zhexue Huang, and Yulin He, “A Two-Stage Data Processing Algorithm to Generate Random Sample Partitions for Big Data Analysis,” 2018 International Conference on Cloud Computing (CLOUD2018), June 25 - 30, 2018, Seattle, USA.
8. **Tamer Z. Emara**, Salman Salloum, Yulin He, and Chenghao Wei, “A Block-Based Big Data Management System for Large-Scale Data Processing and Analysis,” 5th China Computer Federation Conference on Big Data (CCFBigData2017), October 13-15, 2017, Shenzhen, China.
9. **Tamer Z. Emara**, "Maximizing Power Saving for VoIP over WiMAX Systems," *International Journal of Mobile Computing and Multimedia Communications (IJMCMC)*, Vol 7, Issue 1, pp 32-40, 2016.
10. **Tamer Z. Emara**, Ahmed I. Saleh, Hesham Arafat, “Power saving mechanism for VoIP services over WiMAX systems,” *Wireless Networks*, Vol 20, Issue 5, pp 975-985, 2014.

Awards:

2021	Excellent Paper Award, Big Data Mining and Analytics.
2017	Shenzhen Universiade International Scholarship, China.
2016-2018	Shenzhen University Outstanding Ph.D. Students scholarship (phase 1), China.
2016-2020	Shenzhen University Fellowship, China.
2016-2020	Shenzhen University Grant, China.
2015	ITEC/SCAAP program, Ministry of External Affairs, India.

Academic Training:

- “Building and managing a research team” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from June 21, 2021 to June 22, 2021.

- “Professional Leader Skills” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from May 25, 2021 to May 26, 2021.
- “International Scientific Publishing” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from May 23, 2021 to May 24, 2021.
- “International Scientific Publishing” by International Center for HRM and Continuing Education, Kafrelsheikh University, Egypt, from May 4, 2021 to May 6, 2021.
- “Strategic Planning: Faculties and Institutes of Higher Education” by National Authority for Quality Assurance and Accreditation of Education, Egypt, from February 17, 2021 to February 18, 2021.
- “Teaching Strategies and Effective Learning: Faculties and Institutes of Higher Education” by National Authority for Quality Assurance and Accreditation of Education, Egypt, from February 13, 2021 to February 14, 2021.
- “Time and Meeting Management” by International Center for HRM and Continuing Education, Kafrelsheikh University, Egypt, from February 10, 2021 to February 12, 2021.
- “Quality Standards in the Educational Process” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from February 9, 2021 to February 10, 2021.
- “Self-Study Preparation Skills” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from February 2, 2021 to February 3, 2021.
- “Strategic Planning” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from February 2, 2021 to February 3, 2021.
- “Institutional Development and Management Thinking” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from January 9, 2021 to January 10, 2021.
- “Time Management” by Higher Institute of Engineering and Technology, Kafrelsheikh, Egypt, from January 2, 2021 to January 3, 2021.
- "Functional Program Design in Scala" by École Polytechnique Fédérale de Lausanne on Coursera. Certificate earned at Saturday, March 24, 2018 3:51 PM GMT.
- “Functional Programming Principles in Scala” by École Polytechnique Fédérale de Lausanne on Coursera. Certificate earned at Tuesday, February 27, 2018 4:05 PM GMT.
- "Specialized Programme on Big Data Analytics", Center for Development Advanced Computing (C-DAC), Noida, India, from 21 DEC 2015 to 11 MAR 2016.
- “Cloud Computing Enabling Technologies” certificate on IEEE. Certificate earned on September 23, 2015.
- “4G Broadband LTE” certificate on IEEE. Certificate earned on September 23, 2015.
- “LTE Taster” on MIPICAL. Certificate earned in September 2015.
- “Journal Author Academy Part 1- Writing your Manuscript” on Springer. Certificate earned in September 2015.
- “Journal Author Academy Part 2- Submitting and Peer Review” on Springer. Certificate earned in September 2015.
- “html5 css3 js” on Rwaq from June 1, 2015 to Sept 4, 2015. Certificate earned on Sept 4, 2015.
- “How to get published preparing your manuscript” on Elsevier. Certificate earned on July 3, 2015.
- “Preparing your manuscript” on Elsevier. Certificate earned on July 3, 2015.

- “Structuring your article” on Elsevier. Certificate earned on July 3, 2015.
- “Using proper manuscript language” on Elsevier. Certificate earned on July 3, 2015.
- “How do Editors look at your paper” on Elsevier. Certificate earned on June 25, 2015.
- “Making sense of science stories” on Elsevier. Certificate earned on June 21, 2015.
- “Publishers Origins, roles and contributions” on Elsevier. Certificate earned on June 21, 2015.
- The journal publishing cycle on Elsevier. Certificate earned on June 21, 2015.
- “Tell your research story with AudioSlides” on Elsevier. Certificate earned on June 19, 2015.
- “Discoverability, getting your work into the hands of users” on Elsevier. Certificate earned on June 19, 2015.
- “Cloud-Based Solutions for Big Data” certificate on IEEE. Certificate earned on Feb 2, 2015.

Teaching Activity:

- Teaching various courses in computer science and engineering including:
 - Intelligent Systems.
 - Computer and Society.
 - Computer Programming.
 - Computer Architecture.
 - Data Structures and Algorithms.
 - Engineering Physics (Physics I).
 - Modern Physics (Physics II).
 - Introduction to Computer and Programming.
 - Measurement Lab I, II, III, IV.
 - Logic Design.
 - Computer Engineering 1
 - Computer Engineering 2
 - Database Systems.
 - Computer Network.

Professional Activities:

- 2020-2021 Executive manager of Quality Assurance Unit at Higher Institute of Engineering and Technology (KFS-HIET), Kafr El-Sheikh, Egypt.
- 2020-2021 Member of Academic Board at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2020-2021 Member of Complaints and Suggestions Committee at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2020-2021 Member of Training Committee at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2007-2016 Member of Laboratory Inventory Committee at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2013-2016 Member of Quality Assurance Unit at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.

- 2015-2016 Member of Commission financial decision and Technical Committee to decide the purchase of equipment and experiments for communications lab at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2015 Member of Committee on Undergraduate Curriculum Development and Planning at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2015 Member of Commission financial decision and Technical Committee to decide the purchase of equipment and experiments for automatic control and microprocessor labs at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2014 Member of Commission financial decision and Technical Committee to decide the purchase of equipment and experiments for physics and modern physics labs at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2007-2013 Member of order and control committee at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2011 Member of Commission financial decision and Technical Committee to decide the purchase of equipment and experiments for Computers lab at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.
- 2010 Member of Commission financial decision and Technical Committee to decide the purchase of equipment and experiments for physics and modern physics labs at Higher Institute of Engineering and Technology, Kafr Elsheikh, Egypt.

Professional Service

- 2022 TPC member of 2022 International Conference on Artificial Intelligence and Computer Science (AICS2022), July 30-31, 2022, Beijing, China.
- 2022 TPC member of 2022 International Conference on Intelligent Computing, Automation and Applications (ICAA2022), July 22-24, 2022, Hangzhou, Zhejiang, China.
- 2021 TPC member of 2021 International Conference on Intelligent Computing, Automation and Applications (ICAA2021), June 25-27, 2021, Nanjing, Jiangsu, China.
- 2018-2022 Peer reviewer, IEEE Access.
- 2015-2021 Peer reviewer, Communications and Network.
- 2019 Peer reviewer, Indonesian Journal of Electrical Engineering and Computer Science.
- 2018 Peer reviewer, IEEE Wireless Communications.
- 2017 Peer reviewer, International Journal of Communication Systems.
- 2016 Peer reviewer, IEEE Transactions on Wireless Communications.

Conferences and Workshops

1. 6th Shenzhen International Conference on Advanced Science and Technology, December 3-8, 2017, Shenzhen, China.
2. 5th China Computer Federation Conference on Big Data, October 13-15, 2017, Shenzhen, China.

3. 1st Kafrelsheikh University International Workshop on "Prospects of Nanocrystals: Basics and applications," from 25-26 Nov. 2014, Kafrelsheikh, Egypt.

Professional Associations

1. IEEE Membership since 2018 (member no. 93287419)
2. IEEE Young Professionals
3. IEEE Computer Society Membership
4. Big Data Community, IEEE
5. ACM Membership since 2015 (member no. 0017340).
6. Member of the Egyptian Engineering Syndicate.
7. Member of Egyptian Society of Engineers.

Extracurricular Activities

- (2008-2012) Vice Chairman of the Board of Elnattaf Youth Center, Kafr Elsheikh, Egypt.
- Member of Elnattaf Youth Center, Kafr Elsheikh, Egypt.
- A founding member of Services and Social Assistance Association at Elnattaf (a non-profit charity), Kafr Elsheikh, Egypt.
- Member of the board of Services and Social Assistance Association at Elnattaf, Kafr Elsheikh, Egypt.