

CURRICULUM VITAE



Tamer Omar Diab

Assistant Professor

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EDUCATION

Ph.D.	Computer Engineering, Vladimir State University, Russia, 11/2005
M.S.	Computer Engineering, Cairo University, Egypt, 03/2000
B.S.	Electrical Engineering, Banha Higher Institute of Technology, Egypt, 06/1994

ACADEMIC EXPERIENCE

- Part Time Lecturer's Assistant in The Department of Computer Science at Modern Academy in Maadi from 2000-2001
- Assistant Professor in The Department of Electrical Engineering at Banha Faculty of Engineering from 2005-2006 and from 2016 Until Now
- Assistant Professor in the Department of Electrical Engineering at Omar EL-Moktar University - Libya from 2006-2016
- Part Time Assistant Professor in the Department of Mechatronics Department at Modern Sciences & Arts - MSA University from 2021-2023
- Manager of IT Unit in Banha Faculty of Engineering from 2017 Until Now

TEACHING

Courses Taught at Undergraduate Level

- Computer Programming
- Computer Architecture
- Computer Organization
- Operating System
- Computer Programing
- Numerical Analysis

- Computer Network
- Microprocessor Based System
- Microcontroller
- Signal and System
- Digital Signal Processing
- Digital Image Processing
- Neural Networks
- Data Structure
- Data Base Management System
- Data structure and Algorithms

Courses Taught at Graduate Level

- Microprocessor Based System
- Microcontroller
- Selected Topic in Electrical Engineering
- Advanced Computer Network Security

Teaching Related Funded Projects

- Lecturer at Information Technology Center for Electronic Services, Banha University

Student Mentor

- Undergraduate advisor of Electrical Engineering Department

RESEARCH**Areas of Research Interests**

- Cryptography
- Fuzzy Logic and Neural Networks
- Digital Image Processing

Publications

- Published over 20 peer-reviewed journal and conference papers
<https://www.researchgate.net/profile/Tamer-Diab-3>
- The list of the last publications

- [1] T. O. Diab and A. M. Darwish, "A new linear model for image representation for use with Kalman filter restoration," 2000 10th European Signal Processing Conference, 2000, pp. 1-4.
- [2] Eladawi, Ahmad E., Tamer O. Diab, and Hammad T. Elmetwally. "Forming Temperature Investigation of Aluminum and Aluminum/Silicon Carbide Using Image Texture Features." Machining, Joining and Modifications of Advanced Materials. Springer, Singapore, 2016. 33-44.
- [3] Eladawi, A. E., Sayed, S. A., Elmetwally, H. T., & Diab, T. O. (2017). Prediction of Strain Rate of Aluminum/Silicon Carbide Using Gray Level Run-Length Matrices. Journal of Energy and Power Engineering, 11, 355-361. DOI:10.17265/1934-8975/2017.05.008
- [4] Elsayed, M. M., Khalil, A. T., Diab, T. O. M., & Mohra, A. S. S. S. (2018). Hybrid method for brain tumor extraction and MRI scan classification. International Journal of Engineering & Technology, 7(4), 4769-4779.

- [5] H. A. M. A. Basha, A. S. S. Mohra, T. O. M. Diab and W. I. E. Sobky, "Efficient Image Encryption Based on New Substitution Box Using DNA Coding and Bent Function," in IEEE Access, vol. 10, pp. 66409-66429, 2022, doi: 10.1109/ACCESS.2022.3183990.
- [6] El-Meligy, N. E., Diab, T. O., Mohra, A. S., Hassan, A. Y., & El-Sobky, W. I. (2022). A Novel Dynamic Mathematical Model Applied in Hash Function Based on DNA Algorithm and Chaotic Maps. *Mathematics*, 10(8), 1333.
- [7] Maolood, A. T., Farhan, A. K., El-Sobky, W. I., Zaky, H. N., Zayed, H. L., Ahmed, H. E., & Diab, T. O. (2023). Fast Novel Efficient S-Boxes with Expanded DNA Codes. *Security and Communication Networks*, 2023.
- [8] Hala Saeed, Hossam E.Ahmed, Tamer O.Diab, Hossam L.Zayed, Hany Nasry Zaky, and Wageda I.Elsobky, "Evaluation of the Most Suitable Hyperchaotic Map in S-Box Design Used in Image Encryption," *International Journal of Multidisciplinary Research and Publications (IJMRAP)*, Volume 5, Issue 4, pp. 176-182, 2022.
- [9] SeragEldin, S. M., El-Latif, A. A. A., Chelloug, S. A., Ahmad, M., Eldeeb, A. H., Diab, T. O., ... & Zaky, H. N. (2023). Design and Analysis of New Version of Cryptographic Hash Function Based on Improved Chaotic Maps with Induced DNA Sequences. *IEEE Access*.
- [10] H. Saeed, M. A. Elsis, T. O. Diab, W. I. El Sobky, M. S. Abdel-Wahed and A. K. Mahmoud, "Famous Digital Signatures Used In Smart Contracts," 2023 International Telecommunications Conference (ITC-Egypt), Alexandria, Egypt, 2023, pp. 649-656, doi: 10.1109/ITC-Egypt58155.2023.10206283.
- [11] T. O. Diab, W. I. A. Sobky, S. M. SeragEldin, A. K. Mahmoud, H. N. Zaky and M. A. Hogo, "Fast Simple Image Encryption Technique Based on Chaos Based System," 2023 International Telecommunications Conference (ITC-Egypt), Alexandria, Egypt, 2023, pp. 643-648, doi: 10.1109/ITC-Egypt58155.2023.10206390.
- [12] El-Meligy, N. E., El-Sobky, Mohra, A. S., Hassan, A. Y., & Diab, T. O., " New Hiding Technique in Digital Signature Based on Zigzag Transform and Chaotic Maps," *Jilin Daxue Xuebao (Gongxueban)/Journal of Jilin University (Engineering and Technology Edition)*, Vol: 42 Issue: 09-2023 .

Training Courses

- ICDL
- Effective Teaching
- Scientific Research
- Self-assessment and external review
- Website management
- Strategic Planning
- Question banks and electronic tests
- Effective presentation skills
- Digital Transformation Fundamentals

Computer Skills

- Office application programming
- C++
- MATLAB
- Python
- Visual Basic

Languages

- Arabic (mother tongue)
- English (fluent, written and spoken)
- Russian (good)

Signature: Tamer Omar Mohammed Dib