

## Curriculum Vitae

### Dr. Ayam Mohsen Abbass

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#### PERSONAL SUMMARY:

- Date of Birth: 1979/12/1
- Place of work: Computer Engineering, College of Engineering, Al-Mustansiriya University
- Language: English, Arabic
- Scientific Title: Lecturer (PhD)

#### EDUCATION:

- Ph.D.: Laser and optoelectronic Engineering/ networks and communication systems, Al-Nahrain University, 2024
- M.Sc.: Computer Engineering, Al-Nahrain University, 2014.
- B.Sc.: Computer and Software Engineering, Al-Mustansiriya University, 2003.

#### ACADEMIC HONORS AND AWARDS:

- 20-Acknowledgments from the President of Al- Mustansiriya University -Iraq.
- 30 -Acknowledgments from Dean of the Faculty of Engineering, Al- Mustansiriya University-Iraq.

#### ACADEMIC /TEACHING EXPERIENCE:

- (2006-2013): Engineer, Dept. of Computer Engineering, Al-Mustansiriya University.
- (2014-2026): Lecturer, Dept. of Computer Engineering, Al-Mustansiriya University.

#### COURSES TAUGHT:

Undergraduate
Teaching courses such as Computer Control, Microcomputer, Microcontroller, Intelligent Systems, Digital Signal Processing, and Advanced Mathematics.

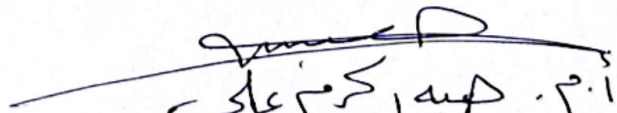
#### PUBLICATIONS:

- [1] S. K. Ahmed, M. E. Dubakh, and A. M. Abbas, "Design of Electronic PID Controller Using Genetic Algorithms," *Al-Mansour Journal*, vol. 15, no. 1, pp. 47–70, 2011.
- [2] M. Z. Al-Faiz and A. M. Abbass, "Design and Implementation of Fuzzy Logic Controller for IVAX SCARA Robot Using Real Time Window Target," *International Journal of Science, Engineering and Computer Technology*, vol. 3, no. 10, p. 373, 2013.
- [3] M. Ayam, S. M. Liqaa, and T. H. Raoof, "Speed control for separately excited DC motor with PID controller, GA, and PSO," *International Journal of Recent Scientific Research*, vol. 7, no. 7, pp. 12673–12678, 2016.
- [4] M. A. Tawfeeq and A. M. Abbass, "Control of Robot Directions Based on Online Hand Gestures," *Iraqi Journal of Electrical and Electronic Engineering*, vol. 14, no. 1-2018, 2018.
- [5] E. H. Karam, A. M. Abbass, and N. S. Abdul-Jaleel, "Design of Hybrid Neural Fuzzy Controller for Human Robotic Leg System," *Al-Khwarizmi Engineering Journal*, vol. 14, no. 1, pp. 145–155, 2018.

- A. Al-awad, A. M. Abbas, and M. E. Dubkh, "PID Controller Design for a Magnetic Levitation System Using an Intelligent Optimisation Algorithm," *International Journal of Simulation Systems, Science & Technology (IJSSST)*, vol. 19, no. 1, 2018.
- [7] H. Al-Behadili, M. E. Dubakh, and A. M. Abbass, "Three-phase Induction Motor Speed Estimator Using Genetic Algorithm Based on Elman Recurrent Neural Network," in *2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)*, 2019, pp. 1-4.
- [8] A. M. Abbass, "Design of Mobile Robot for Obstacle Avoidance using Microcontroller," *Journal of Engineering and Applied Sciences*, vol. 14, no. 18, pp. 6782-6787, 2019.
- [9] L. S. Mezher and A. M. Abbas, "Mixed Hill Cipher methods with triple pass protocol methods," *International Journal of Electrical and Computer Engineering*, vol. 11, no. 5, p. 4449, Oct. 2021.
- [10] L. S. Mezher, A. M. Abbas, and B. J. Saleh, "A Comparative Study of a Hybrid Approach Combining Caesar Cipher with Triple Pass Protocol and Krill Herd Optimization Algorithm (KHO)-Based Hybridization," *International Journal of Intelligent Engineering & Systems*, vol. 16, no. 6, 2023.
- [11] A. M. Abbass and R. S. Fyath, "Simulation Platform for End-to-End Deep Learning Based Coherent Fiber Communication System," in *2023 3rd International Scientific Conference of Engineering Sciences (ISCES)*, 2023, pp. 59-63.
- [12] A. M. Abbass and R. S. Fyath, "Enhanced approach for artificial neural network-based optical fiber channel modeling: Geometric constellation shaping WDM system as a case study," *Journal of Applied Research and Technology*, vol. 22, no. 6, pp. 768-780, 2024.
- [13] A. M. Abbass and R. S. Fyath, "High-Capacity Coherent WDM Networks Empowered by Probabilistic Shaping and End-to-End Deep Learning," *Journal of Telecommunications and Information Technology*, no. 2, pp. 71-81, 2024.
- [14] A. M. Abbass, B. J. Saleh, and L. S. Mezher, "Design of optimized desired optimal controller (DOC)-based multivariable model reference adaptive control (MRAC) algorithm for robotic human knee flexion during gait," *Revue d'Intelligence Artificielle*, vol. 38, no. 2, p. 541, 2024.
- [15] L. S. Mezher, A. M. Abbass, and B. J. Saleh, "Improving image quality via deep learning: Aspects of speckle noise reduction applying the optimal weighted filter," *Journal of Applied Research and Technology*, vol. 22, no. 3, pp. 419-431, 2024.
- [16] A. M. Abbass and R. S. Fyath, "Performance investigation of geometric constellation shaping-based coherent WDM optical fiber communication system supported by deep-learning autoencoder," *Results in Optics*, vol. 15, p. 100629, 2024.
- [17] A. M. Abbass, A. Y. F. Saedi, and J. Q. Kadhim, "Enhanced Depth-First Search Algorithm for Improving the Efficiency of Route Construction in Data Center Networks," *Engineering, Technology & Applied Science Research*, vol. 15, no. 2, pp. 22152-22158, 2025.



الأستاذ الدكتور  
علي خالد جاسم  
معاون العميد لشؤون الطلبة



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