

### Curriculum Vitae

# **Tariq Tashan**

Mustansiriyah University – College of Engineering Mobile:

Email: tariq.tashan@uomustansiriyah.edu.iq

## PERSONAL SUMMARY:

 Dr. Tashan is an associate professor at the Electrical Engineering department, Mustansiriyah University, Baghdad-Iraq. He obtained his BSc in Electrical Engineering and MSc in Communication and Electronics from Mustansiriyah University. He obtained his PhD in Biologically Inspired Speaker Verification from Nottingham Trent University and Member of the Institution of Engineering and Technology (MIET). His research interests include Speaker recognition, Neural Networks and pattern recognition.

## **EDUCATION:**

- 2009 2013 Nottingham Trent University, Nottingham, UK Ph.D. in (Biologically Inspired Speaker Verification)
- 1999 2001 Mustansiriyah University, Baghdad, Iraq
  M.Sc. in Communication and Electronics Engineering (Objective Tests of Speech Signal)
- 1995 1999 Mustansiriyah University Baghdad, Iraq
  B.Sc. in Electrical Engineering

#### **ACADEMIC HONORS AND AWARDS:**

- Rank 1st of M.Sc. class of the Electrical Engineering Department 1999-2001.
- Rank 3rd of B.Sc. class of the Faculty of Engineering 1999.
- Best Technical Paper Prize in The Thirty-second Special Group of Artificial Intelligence (SGAI)
  International Conference, Cambridge, UK, 11th-13th December 2012.

## ACADEMIC / TEACHING EXPERIENCE:

Lecturing in different modules in both the Electrical Engineering Department and the Computer Engineering Department at the Faculty of Engineering, Mustansiriyah University

#### **COURSES TAUGHT:**

Undergraduate	Postgraduate
Mathematics (1st and 2nd year)	Intelligent Systems.
Analogue Communication (3rd year)	Digital Image Processing
	Digital Signal Processing
	Advanced Mathematics.
	Information Theory.
	Research Methods.
	English Language.

## **PROFESSIONAL AFFILIATIONS:**

- Consultant Systems Analyst (Voicekey Ltd., Nottingham, UK): Systems Analyst in speaker verification platform: Testing speaker verification systems, Data analysis, System optimisation. (2010-2012)
- Quality Assurance Manager: College of Engineering, Mustansiriyah University (September 2016-January 2018)

### **PUPLICATIONS:**

### **JOURNAL PAPERS:**

- T. Tashan and A. K. Kadhim, "PSO based multilevel MRI compression using compressive sensing," Bulletin of Electrical Engineering and Informatics, vol. 11, no. 5, 2022.
- 2. E. F. Mohsin, T. Tashan, and E. H. Karam, "Design and FPGA implementation of immune-PID controller based on BBO algorithm for heart rate regulation," *Int J Intell Eng Syst*, vol. 14, no. 2, pp. 432-440, 2021.
- 3. D. H. Mohammed and T. Tashan, "Estimation of Environment Recording Model for Dual-Channel Speech Enhancement," *Journal of Engineering and Sustainable Development (JEASD)*, vol. 25, no. Special\_Issue\_2021, 2021.
- 4. D. Hamza and T. Tashan, "Dual channel speech enhancement using particle swarm optimization," Indonesian Journal of Electrical Engineering and Computer Science, vol. 23, no. 2, pp. 821-828, 2021.
- 5. T. Tashan, E. H. Karam, and E. F. Mohsin, "Immune pid controller based on differential evolution algorithm for heart rate regulation," *International Journal of Advanced Computer Research*, vol. 9, no. 42, pp. 177-185, 2019.
- 6. E. H. Karam, T. Tashan, and E. F. Mohsin, "Design of Model Free Sliding Mode Controller based on BBO Algorithm for Heart Rate Pacemaker," *International Journal of Modern Education & Computer Science*, vol. 11, no. 3, 2019.
- 7. T. Tashan and M. Al-Azawi, "Multilevel magnetic resonance imaging compression using compressive sensing," *IET Image Processing*, vol. 12, no. 12, pp. 2186-2191, 2018.
- 8. T. Tashan, T. Allen, and L. Nolle, "Speaker verification inspired by the physiology of hearing using spiking self-organising map," *Expert Systems*, vol. 34, no. 5, p. e12076, 2017.
- 9. A. F. Hassoon, M. K. AL-Azzawi, and T. Tashan, "Face Identification based on Contourlet Transform and Multi-layer Perceptron Classifier," *International Journal of Computer Applications*, vol. 975, p. 8887, 2016.
- 10. T. Tashan, T. Allen, and L. Nolle, "Speaker verification using heterogeneous neural network architecture with linear correlation speech activity detection," *Expert Systems*, vol. 31, no. 5, pp. 437-447, 2014.
- 11. J. W. Salman and A. L. T. M. Tashan, "Design Study of the Crossed Field Antenna," *Journal of Engineering and Sustainable Development (JEASD)*, vol. 10, no. 4, 2006.
- 12. T. Tashan and M. Al-Azawi, "Speech Intelligibility Evaluation Using Cepstral Distance Measure," Journal of Engineering and Development, College of Engineering, Mustansiriyah University, Baghdad-Iraq, vol. 6, no. 2, pp. 12-26, 2002.

#### **CONFERENCE PAPERS:**

- 1. T. Tashan, T. Allen, and L. Nolle, "Biologically inspired speaker verification using Spiking Self-Organising Map," in *International Conference on Innovative Techniques and Applications of Artificial Intelligence*, 2012: Springer, pp. 5-17.
- 2. T. Tashan, T. Allen, and L. Nolle, "Vowel based speaker verification using self organising map," in *The Eleventh LASTED International Conference on Artificial Intelligence and Applications (ALA 2011)*, 2011.

- T. Tashan and T. Allen, "Two stage speaker verification using self organising map and multilayer perceptron neural network," in *International Conference on Innovative Techniques and Applications of Artificial Intelligence*, 2011: Springer, pp. 109-122.
- T. Tashan, "Modifying the E-plates in the Cross Field Antenna By Genetic Algorithms," presented at the Scientific Conference on Engineering, 2007.

### **THESIS**

- T. Tashan, Biologically inspired speaker verification. Nottingham Trent University (United Kingdom), 2012.
- T. M. Kamal, "Objective tests of speech signal," MSc thesis, Department of Electrical Engineering, College of Engineering, Mustansiriyah University, 2001.

# PROFFESSIONAL DEVELOPMENT

- Member of the Institution of Engineering and Technology, UK (MIET). (2012-Present)
- Member of the Iraq Engineers Union, Iraq. (2001-Present).
- Participation in "ABET Working Group Webinar Series", through the U.S.-Iraq Higher Education Partnerships Program. A program developed by IREX with the support of the US Embassy in Iraq. (2017).

Head of Department Signature

عَرِّهُ جَمِّنَا لَرْجَعُنَا مِيمُّ تعاون المتسالشة ون العامَة ا و كانتويون Signama محمل رئيس قسم الهندسة الكهربائية