Curriculum Vitae

WALAA MOHAMMED HASSAN KHALAF

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PERSONAL SUMMARY:

- Assistant Professor since 2014, Expert of Design and Implementation of Electronic Noses, and have some publications in Image Processing.

EDUCATION:

- Ph.D. #1: Ph.D. In Operational Researches-Italy 2009.
- M.Sc. #2: M.Sc. In Electronics and Telecommunications Engineering Science-Iraq 2001.
- B.Sc. #3: B.Sc. In Electrical Engineering Science-Iraq 1996.

ACADEMIC HONORS AND AWARDS:

- #1:
- #2:

ACADEMIC /TEACHING EXPERIENCE:

- #1:
- #2:

COURSES TAUGHT:

Undergraduate	Graduate
1- Advanced Engineering Mathematics.	1- Advanced Digital Signal Processing.
2- System Security and Ciphering.	
3- Digital Signal Processing.	
4- Digital Logic Design.	
5- Advanced Digital Logic Design.	

PROFESSIONAL AFFILIATIONS:

- Coordinator of Computer and Software Engineering Department 2013
- Head of Computer and Internet Section, 2014- till now.

PUPLICATIONS:

- Manlio Gaudioso, **Walaa Khalaf**, Calogero Pace, **"SVM Classification in the Design of an Electronic Nose"**. 38th Annual Conference of Italian Operations Research Society, Genova-Italia, 5-8 September 2007.

- Manlio Gaudioso, **Walaa Khalaf**, Calogero Pace, **"On the Use of the SVM Approach Analyzing an Electronic Nose"**. 7th International Conference on Hybrid Intelligent System (HIS 2007), Kaiserslautern-Germany, 17-19 September, 2007, IEEE Computer Society: 2007, pp. 42-46.

- **Khalaf Walaa**, Pace Calogero, Gaudioso Manlio, **"Gas Detection via Machine Learning"**. PROCEEDINGS OF WORLD ACADEMY OF SCIENCE, ENGINEERING AND TECHNOLOGY, Cairo-Egypt, Feb. 6-8, 2008, Vol. 27, pp. 139-143.

- **Khalaf Walaa**, Pace Calogero, Gaudioso Manlio, **"Gas Detection via Machine Learning"**. *International Journal of Intelligent Technology*, 2008, Vol. 3, n. 1, pp. 43-47.

- **Khalaf Walaa**, Pace Calogero, Gaudioso Manlio, **"Least Square Regression Method for Estimating Gas Concentration in an Electronic Nose System"**. Sensors, 2009, Volume 9, no. 3, pp. 1678-1691.

- **Khalaf Walaa, "Sensor Array System for Gases Identification and Quantification".** Advanced Technologies, Chapter in Book, ISBN 978-953-307-017-9. By InTechWeb.org. (This Chapter is downloaded more than 3000 times till 24-09-2013).

- **Khalaf Walaa**, Giancarlo Raiconi, and Manlio Gaudioso. **"An Analytical Model for Gas Detection and Concentration Estimate",** submitted for publishing.

- **Walaa Khalaf,** Giancarlo Raiconi, and Manlio Gaudioso, **"Design and Implementation of an Electronic Nose Based on Power-Law Model",** Engineering and Development Journal, 2011, V o l u m e   4 ,   n o .   1 5 ,   p p .   7 7 - 8 6 .

- **Walaa Khalaf, "On the Use of Supervised Learning Method for Authorship Attribution",** Eng. & Tech. Journal, Vol.30, No. 2, 2012, pp. 282-292.

- Calogero Pace, **Walaa Khalaf,** Mariangela latino, Nicola Donato, and Giovanni Neri, **"E-Nose Development for Safety Monitoring Applications in Refinery Environment",** Proc. Eurosensors XXVI, September 9-12, 2012, Kraków, Poland.

- **Walaa Khalaf,** Dhafer Zaghar, and Ayad Abdulkareem, **"A Novel Approach to Design and Implementation of a Commercial Remote Control Image Acquisition System",** 3rd International conference on CIRCUITS, SYSTEMS, CONTROL, SIGNALS (CSCS '12), Barcelona, Spain October 17-19, 2012.

- **Walaa Khalaf, "Electronic Nose System for Safety Monitoring at Refineries",** Journal of Engineering and Development, Vol. 16, No. 4, Dec. 2012, pp. 220-228.

- **Walaa Khalaf,** Manlio Gaudioso, and Annabella Astorino, **"Edge detection by spherical separation",** Computational Management Science, Vol. 11, No. 4, 2014, pp. 517-530.

- **Walaa Khalaf,** Mohammed Ali Tawfeeq, and Kadhum Al-Majdi, **"Edge Detection Method Using Scaled Conjugate Gradient Training Algorithm in Backpropagation Neural Network",** Eng. & Tech. Journal, Vol.32, No. 2, 2014, pp. 385-395.

- Calogero Pace, Letizia Fragomeni, **Walaa Khalaf, "Developments and Applications of Electronic Nose Systems for Gas Mixtures Classification and Concentration Estimation",** International Conference for Electronic Applications, Rome-Italy, 5-6 May 2014.

- SG. Leonardi, M. Cannistraro, E. Patti, D. Aloisio, N. Donato, G. Neri, C. Pace, M. Mazzeo, and **W. Khalaf, "Development of Electronic-Nose Technologies for Biomedical Applications",** Sensors and Microsystems, Springer International Publishing, 2014, pp. 475-478.

- **W. Khalaf**, A. Astorino, P. D'Alessandro, and M. gaudioso, **"A DC optimization-ba Clustering Technique for edge Detection"**, Optimization Letters, 2016, pp. 1-14

- **W. Khalaf,** N. Hamed, and K. Al-Majdi, **"A NOVEL EDGE DETECTION METHOD USING K-MEANS CLUSTERING",** Journal of Engineering and Development, Under Publication.

PROFFESSIONAL DEVELOPMENT

- Certifications.
- Conferences.
- Workshops.