

SALEH KAMAL HARIDY ALY

Associate Professor

Education:

- Ph.D. Computer Science and Engineering, Kyushu University, Japan, 2010.
- M.Sc Computer Science and Engineering, Faculty of Engineering, Assuit University, Egypt, 2004
- B.Sc. Electrical Engineering (Major: Computer and Control Engineering), Faculty of Engineering, Assuit University, Egypt, 1997

Academic Experience:

- Academic Appointment – Majmaah University
2017 Associate Professor, Computer Engineering Department
- Academic Appointment – Aswan University
2015 Associate Professor, Electrical Engineering Department
- Academic Appointment – Aswan University
2010 Assistant Professor, Electrical Engineering Department
- Academic Appointment – Aswan University
2004 Assistant Lecturer, Electrical Engineering Department
- Academic Appointment – Aswan University
1998 Teaching Assistant, Electrical Engineering Department

Non-Academic Experience:

- Head of Electrical Engineering department, Faculty of Engineering, Aswan University, 2015
- Manager of IT unit in the Faculty of Engineering, Aswan University, 2014-2015
- Team Leader for the developing and accrediting of Computer Engineering Program in the faculty of Engineering, Aswan University, 2016
- Member in the engineering consultant office of the faculty of Engineering

Certifications or Professional Registrations:

Current Membership in Professional Organizations:

- Egyptian Engineering Syndicate

Honors and Awards:

- Scientific publishing award from Aswan university, 2015, 2016
- Ph.D. Scholarship granted from Egyptian government in the period from Oct. 2005 until Oct. 2009.
- Best young Author Award: granted by the organizing committee of the 12th International Symposium on Artificial Life and Robotics.
- Post-doc Scholarship granted by Egyptian government in the period from Jan. 2013 till July 2013.
- Visiting Researcher at Tsukuba University, Japan in the period from March. 2014 till September 2014.
- Entering the Marquis Who's Who in the World®

Service Activities (within and outside of the institution):

- Manager of Academic Advisor Unit, CCIS Majmaah University
- **Technical Reviewer** for the following international Journals: IEEE Transaction on Neural Networks and Learning Systems, IET Computer Vision, IET Biometrics, International Journal of Applied Mathematics & Information Science
- **Software Consultant** for ITIDA, Egypt.
- **Technical Judge in Aswan Startup- weekend**, Upper Egypt in Action Events
- Serving as a **head of the Egyptian Student Union in Japan (ESAJ)** – Kyushu area. From 2007-2008
- Participate in organizing the first international conference between Egypt and Japan in Tokyo, 2008 <http://www.esaj.net/EJICST2008/index.php>

Most Important Publications and Presentations (Past five years):

1. M. Hassaballah and **S. Aly**, "Face Recognition: Challenges, Achievements, and Future Directions," **IET Computer Vision**, Vol. 9, Iss.4, pp. 614-626, 2015.
2. **S. Aly**, L. Hassan and A. Sagheer, " Partially Occluded Pedestrian Classification using Three stage Cascaded Classifier," 9th IEEE International Conference on Computer Engineering and Systems (**ICCES 2014**), December 2014, Cairo.
3. **S. Aly**, "Partially occluded pedestrian classification using histogram of oriented gradients and local weighted linear kernel support vector machine," **IET Computer Vision**, Vol. 8, No.6, PP. 620-628, December 2014.
4. **S. Aly**, "Learning Hierarchical Features Using Sparse Self-organizing Map Coding for Image Classification," 2nd Advanced Machine Learning Technologies and Applications (**AMLTA 2014**), Communications in Computer and Information Science, Vol. 488, **Springer**, November 2014, pp. 321-330.
5. **S. Aly** and S. Mohammed, "Arabic Sign Language Recognition Using Spatio-Temporal Local Binary Patterns and Support Vector Machine," 2nd Advanced Machine Learning Technologies and Applications (**AMLTA 2014**), Communications in Computer and Information Science, Vol. 488, **Springer**, November 2014, pp. 36-45.
6. **S. Aly**, "Learning invariant local image descriptor using convolutional mahalanobis self-organizing map," **Neurocomputing** (142), October 2014, Elsevier, pp. 239-247.
7. A. Abdelbakky and **S. Aly**, " Appearance-based Arabic Sign Language Recognition using Hidden Markov Models," 2nd International Conference of Engineering and Technology (**ICET 2014**), Cairo, April 2014.
8. A. Sagheer , **S. Aly** and S. Anter, "Bimodal Speech Recognition for Robot Applications," International Conference on Man-Machine Interactions (**ICMMI 2013**), Poland , Springer, pp. 87-94 , October 2014.
9. **S. Aly**, D. Deguchi and H. Murase, "Blur-invariant Traffic Sign Recognition Using Compact Local Phase Quantization," 16th IEEE International Conference on Intelligent Transportation Systems (**ITSC 2013**), Netherland, October 2013, pp. 821-827.
10. **S. Aly**, L. Hassan, A. Sagheer and H. Murase, "Partially Occluded Pedestrian Classification using Part-based Classifiers and Restricted Boltzmann Machine Model," 16th IEEE International Conference on Intelligent Transportation Systems (**ITSC 2013**), Netherland , pp. 1065-1070, October 2013.

11. S. Antar, A. Sagheer, **S. Aly**, and M. F. Tolba, "AVAS: Speech database for multimodal recognition applications," 13th IEEE International Conference on Hybrid Intelligent Systems (HIS 2013), Tunisia, pp. 123-128, March 2013.
12. A. Sagheer and **S. Aly**, "An Effective Face Detection Algorithm Based on Skin Color Information," The 8th International Conference on Signal Image Technology and Internet Based Systems (**SITIS 2012**), Italy, November 2012, pp. 90-96.
13. L. Nasrat and **S. Aly**, "Evaluation of Flashover Voltage on Hydrophobic Polymer Insulators with Artificial Neural Network," International Journal of Electrical and Computer Engineering (**IJECE**), Vol.2, No.4, August 2012 pp. 487-494.
14. A. Sagheer and **S. Aly**, "Integration of face detection and user identification with visual speech recognition," The 19th International Conference on Neural Information Processing (ICONIP 2012), Quarter, LNCS, Springer, 2012, Vol. 7667, pp. 479-487.
15. **S. Aly**, A. Shimada , N. Tsuruta and R.-I Taniguchi, "Robust Face Recognition Using Multiple Self-Organized Gabor Features and Local Similarity Matching," The 20th International Conference on Pattern Recognition (ICPR 2010), August 2010, Turkey, pp. 2909-2912.
16. **S. Aly**, N. Tsuruta, and R. i. Taniguchi, "Feature map sharing hypercolumn model for shift invariant face recognition," Journal of Artificial Life and Robotics, Springer, Vol.14, No.2, pp. 271-274, December 2009.
17. **S. Aly**, N. Tsuruta and R.-i. Taniguchi, "Self-Organized Gabor Features for Pose Invariant Face Recognition," Proceedings of the 16th International Conference on Neural Information Processing (**ICONIP 2009**), Thailand, Springer, pp. 733-742, December 2009.
18. **S. Aly**, N. Tsuruta and R.-i Taniguchi, "On Face Recognition Using Hierarchical Self-Organized Gabor Features," Proceeding of the IAPR Conference on Machine Vision Applications (MVA2009), Japan, pp. 475-478, May 2009.
19. **S. Aly**, N. Tsuruta, and R. i. Taniguchi, "Feature map sharing hypercolumn model for shift invariant face recognition," Proceedings of the 14th International Symposium on Artificial Life and Robotics (AROB 2009), Febraury 2009.
20. **S. Aly**, N. Tsuruta, and R.-i. Taniguchi, "Illumination Invariant Face Recognition using Normalized Gabor Features," Proceedings of the International

Workshop on Computer Vision and Its Application to Image Media Processing (WCVIM), Japan, pp. 81-85, January 2009.

21. **S. Aly**, N. Tsuruta and R.-i. Taniguchi, "Face recognition under varying illumination using Mahalanobis self-organizing map," *Journal of Artificial Life and Robotics*, Springer, Vol.13, No.1, pp. 298-301, December 2008.

22. **S. Aly**, N. Tsuruta, R.-i Taniguchi and A. Shimada, "Visual feature extraction using variable map-dimension hypercolumn model," *Proceeding of the IEEE International Joint Conference on Neural Networks (IJCNN 2008)*, Hong Kong, pp. 845-851, June 2008.

23. **S. Aly**, A. Sagheer, N. Tsuruta and R.-i Taniguchi, "Face recognition across illumination," *Journal of Artificial Life and Robotics*, Springer, Vol.12, No.1-2, pp. 33-37, March 2008.

24. Tsuruta, N., **S. Aly**. K. and Maeda, S. "Intelligent Robot Systems Based on Vision Technology-Dimensionality Estimation for Self-organizing Map by Using Spectral Clustering," *Lecture Notes in Computer Science (5226)*, 2008, pp. 1156.

25. **S. Aly**, N. Tsuruta and R.-i. Taniguchi, "Face recognition under varying illumination using Mahalanobis self-organizing map," *Proceedings of the 13th International Symposium on Artificial Life and Robotics (AROB 2008)*, pp. 207-210, January 2008.

26. N. Tsuruta, **S. Aly** and S. Maeda, "Dimensionality Estimation for Self-Organizing Map by Using Spectral Clustering," *Proceeding of the 3rd International Conference on Intelligent Computing (ICIC 2007)*, *Advanced Intelligent Computing Theories and Applications-With Aspects of Theoretical and Methodological Issues*, Springer, LNCS Vol. 4681, pp. 1156-1163, August 2007.

27. **S. Aly**, A. Sagheer, N. Tsuruta and R.-i Taniguchi, "Face recognition across illumination," *Proceedings of the 12th International Symposium on Artificial Life and Robotics (AROB 2007)*, January 2007.

28. N. Tsuruta, **S. Aly**, S. Maeda, S.y Takahashi and T. Morimoto, "Self-organizing map vs. spectral clustering on visual feature extraction for human interface," *IEEE Proceeding of the 1st International Forum on Strategic Technology (IFOST 2006)*, Korea, pp. 55-58, October 2006.

29. **S. Aly**. "Incremental learning algorithm for function approximation and its realization using neural networks" *Proceedings of the 46th IEEE international*

Midwest Symposium on Circuits and Systems (MWSCAS 2003), Cairo, Vol. 2, pp. 986-989, December 2003.