**Curriculum Vitae**

**Hala M. Alshamlan, PhD**

**Personal Information**

* ***Name:*** Hala Mohammad Alshamlan
* ***Nationality***: Saudi
* ***Occupation*** Assistant professor in King Saud University
* ***Emails***: halshamlan@ksu.edu.sa , halaa@mit.edu.
* ***Web Site***: http://faculty.ksu.edu.sa/alshamlan/

**Education:**

* ***2016-2017*** Postdoctoral Fellow, Mechanical Engineering Department, Massachusetts Institute of Technology (MIT).
* ***2010- 2015*** Doctor of Philosophy, Computer Science Department, College of Computer and Information SciencesKing Saud University, Riyadh, Saudi Arabia, GPA 4.97/5 .
* ***2005- 2007*** Master degree of Computer Science, Computer Science Department, College of Computer and Information SciencesKing Saud University, Riyadh, Saudi Arabia, with GPA 4.71/5 and Honor Grade.
* ***2000-2004*** Bachelor of Science in Information Technology, Information Technology Department, College of Computer and Information SciencesKing Saud University, Riyadh, Saudi Arabia, with GPA 4.68/5 and Honor Grade.

**Work Experience:**

* ***2016-2017*** Research Fellow, Mechanical Engineering Department, Massachusetts Institute of Technology (MIT).
* **2015 – Now:** Assistant professor in Information Technology Department college of Computer and Information Science, King Saud University
* **2016-2017:** Researcher in Mechanical Engineering Department, Massachusetts Institute of Technology (MIT)
* ***2007 -2015*** Lecturer in Information Technology Department college of Computer and Information Science, King Saud University.
* ***2012 – Now*** Researcher in Bioinformatics research group
* ***2009- 2013*** Exams Unite Supervisor in National Center For Assessment in Higher Education.
* ***2007- 2010*** Trainer in Riyadh Technical College.

**Skills**

* **Arabic Language:** Excellent (native).
* **English Language:** Very Good.
* **Programming Language:** Visual Basic, C++, Java , Matlap, R\ Bioconductor

**Research Interest:**

Bioinformatics, Artificial Intelligent, Image Processing, Evolutionary Algorithms, Data Mining, Dimensionality Reduction, Microarray Data Analysis, and Cancer Diagnosis.

**Internships**

**Aug 2014 -** Visiting Scholar in Prof. Dr. Mark Borodovsky laboratory, Georgia Tech Center for Bioinformatics and Computational Genomics, Georgia Institute of Technology, Atlanta, GA, USA.

**Performance Development Courses**

1. Sexual Misconduct prevention and Awareness, MIT, Cambridge, USA, 09/13/2016
2. Performance Development: Manager’s Role, Cambridge, MIT, USA, 11/08/2016
3. Everyone Leadership, MIT, Cambridge, USA, 11/10/2016
4. Goal Setting Workshop, MIT, Cambridge, USA, 11/14/2016
5. Correction Action, MIT, Cambridge, USA, 11/15/2016
6. Fundamentals: Post-Award Administration, MIT, Cambridge, USA, 11/16/2016
7. Managing Change and Transition, MIT, Cambridge, USA, 02/14/2017.
8. Managing with Situational Leadership, MIT, Cambridge, USA, 03/09/2017
9. Writing a Great Resume and Cover Letter MIT, Cambridge, USA, 03/07/2017

**Training**

Introduction to R: Basics, Plots, and RNA-Seq Differential Expression Analysis, Harvard Catalyst, Cambridge, USA, May 2016 (Three Weeks)

**Certificate**

[Executive Certificate in Management and Leadership](http://executive.mit.edu/article/mit-sloan-executive-certificate-in-management-and-leadership), MIT Management Sloan School, Cambridge, USA, July 2017.

**Publication**

1. **Ashamlan, H. M**., Badr, G. H., and Alohali, Y. A. The performance of bio- inspired evolutionary gene selection methods for cancer classification using microarray dataset. International Journal of Bioscience, Biochemistry and Bioinformatics 4, 3 (2014), 166–170.
2. **Alshamlan, H.,** Badr, G., and Alohali, Y. Abc-svm: Articial bee colony and svm method for microarray gene selection and multi class cancer classication. To appear in International Journal of Machine Learning and Computing (2015). (EI Index)
3. **Alshamlan, H.,** Badr, G., and Alohali, Y. mrmr-abc: A hybrid gene selection algorithm for microarray cancer classification. BioMed Research International (2015). **(ISI Index, IF: 2.71)**
4. **Alshamlan, H. M**., Badr, G. H., and Alohali, Y. A. Genetic bee colony (gbc) algorithm: A new gene selection method for microarray cancer classification. Computational biology and chemistry 56 (2015), 49–60. **(ISI Index, IF: 1.60)**
5. **Alshamlan, H. M**., Badr, G. H., and Alohali, Y. A study of cancer microarray gene expression profile: Objectives and approaches. Lecture Notes in Engineering and Computer Science, vol. 2 LNECS,pp. 1324–1329, ICSBB 13, London, U.K., 3-5 July, 2013.
6. **Alshamlan, H.,** Badr, G., and Alohali, Y. A Study for Effective Binary Classification Approaches for Cancer Microarray Gene Expression Profile . Presented at the 9th International Symposium on Bioinformatics Research and Applications, Charlotte, ISBRA 2013, NC, USA, May 20-22, 2013.
7. **Alshamlan, H**., Badr, G., and Alohali, Y. Comparative study of gene selection methods for microarray cancer classification. In DaEng (2015), Lecture Notes in Electrical Engineering, Springer. **(ISI Index)**
8. **Alshamlan, H.,** Badr, G., and Alohali, Y. A comparative study of cancer classification methods using microarray gene expression profile. In DaEng (2013), vol. 285 of Lecture Notes in Electrical Engineering, Springer, pp. 389–398. **(ISI Index).**
9. **Alshamlan, H.**, Badr, G., and Alohali, Y. Microarray gene selection and cancer classification method using artificial bee colony and svm algorithms (abcsvm). In DaEng (2015), Lecture Notes in Electrical Engineering, Springer. **(ISI Index, best paper award).**
10. **Hala M. Alshamlan** and Mohammed El Bachir Menai, “ Solving Shortest Hamiltonion Path Problem Using DNA Computing “, The Seventh International Multi-Conference on Computing in the Global Information Technology, Venice , Italy, 2012, pp.76-82.
11. **Hala M. AlShamlan** and Mohammed El Bachir Menai, “ Molecular Computing Viability for Solving Computational Problems (Future and Challenges)”, *International Journal of Computer and Communication Engineering, Vol. 1, No. 3, September 2012, pp.191-195.*
12. **Hala M. Al-Shamlan,** Abdullah S. Al-Mudimigh,” The Chang Management Strategies and Processes for Successful ERP Implementation: A Case Study of MADAR” , JCSI International Journal of Computer Science Issues, Vol. 8, Issue 2, March 2011 ,pp.399-407 (ISI Index).
13. **Hala Alshamlan ,** Addulla Almodimig ,” The Change Management Strategies and Processes for Successful ERP Implementation” , 2011 2nd International Conference on Innovative Computing and Communication and 2011 Asia-Pacific Conference on Information Technology and Ocean Engineering (CICC-ITOE 2011) Macao, China, March 5-6, 2011.
14. **Hala Alshamlan** and Ali El-Zaart, “Breast Cancer Computer Aided Diagnosis (CAD) System”. International Conference on Image and Video Processing and Computer Vision (IVPCV-11). LasVegas, Navada, USA, July 17-20, 2011.
15. **Hala Alshamlan** and Ali El-Zaart, " Texture Feature Extraction for Breast Cancer Mammography Images”, International Conference on Image and Video Processing and Computer Vision (IVPCV-10). Orlando, FL, USA, July 12-14, 2010.
16. **Hala Alshamlan** and Ali El-Zaart, " Feature Extraction Values for Breast Cancer Mammography Images ”, IEEE Explore Digital library, IEEE International Conference On Bioinformatics and Biomedical Technology, 2010. Pp. 335 – 340 (Indexed by EI Compendex and ISI Proceeding).

**Seminars**

**Hala Alshamlan**, “ What is Microarray Gene Expression Profile? ”, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia. Dec 2012.

**Hala Alshamlan,** “ The Main Objectives for Studying Microarray Gene Expression Profile”, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia. Oct 2013.

**Hala M. Alshamlan,** “Computational Methods for Biological Data”, Mechanical Engineering Department, Massachusetts Institute of Technology (MIT). Sep 2016.