

CURRICULUM VITAE

Taysir Hassan Abdel Hamid Soliman

Associate Professor

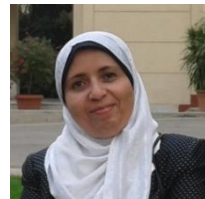
Supervisor of Information Systems Department,

Faculty of Computers and Information,

Assiut University, Egypt

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Objective

- To develop research work in the data mining and bioinformatics area and to participate in multidisciplinary research teams.

Education

- Recipient of academic scholarship from Marymount University, Virginia, USA, for 1988-1989, 1989-1990.
- Dean's List: Spring 1990.
- B. Sc. in computer science, Marymount University, Virginia, USA. Graduated in 1990, with a GPA of 3.29/4.0.
- M. Sc. in computational science, Faculty of Science, Cairo University, Egypt. Graduated August 1996. Thesis title is "Neural Network Pattern Recognizer: Recognition of Printed Arabic Text." Research focused on a new three-level approach for segmentation of printed Arabic text and a neural tree network to recognize segmented Arabic characters.
- Ph.D. in information systems, Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt. Graduated April 2004. Thesis title is "A Novel Approach to Mining Biosequence Data." Research focused on bioinformatics research, where a data mining hybrid approach is developed, which is applied to protein data. Associative classification rules are also developed to predict Gene Ontology Molecular Function.

Skills

- Bioinformatics Experience: Microarray, protein, and KEGG Databases, as well as DrugBank database.
- Bioinformatics Courses Studied: Bioinformatics, Protein Structure, University of Connecticut, USA, Fall 2001 and Spring 2002.
- **Undergraduate courses:** Database concepts, information systems, information engineering, management information systems, office automation, software engineering, web information systems, advanced topics in information systems, system analysis and design, and geographical information systems.
- **Graduate Courses:** Bioinformatics I, Bioinformatics II, Structural bioinformatics, bioinformatics algorithms, Biostatistics, research in bioinformatics, readings in bioinformatics, advanced data mining, advanced topics in database systems, advanced topic in information systems.

- Designed online courses via Moodle, including Course activities and course Performa, including software engineering online course at MVU project, Ain Shams University, 2005.
- An online tutor Diploma, Aalborg University, July 2006.
- Programming languages: Python, R.

Publications

- Dr. Youssef B. Mahdy, and Tayseer Hassan A. Soliman, "A Neural Network for Recognition of Printed Arabic Characters," Proc. of the 3rd International Conf. on AI applications, Cairo, Egypt, pp.112-122, January 4-7, (1995).
- Dr. Youssef B. Mahdy, and Tayseer Hassan A. Soliman, "A Three-Level Segmentation Approach to Arabic Text," Proc. of the 2nd international conference on Engineering Research, Suez Canal University, Port Said, Egypt, pp.240-254, December 19-21, (1995).
- Soliman, H., Taysir, and Shin, Dong-Guk, "A Comparative Study for Mining Biological Data," Proc. of the ISCA 11th International Conference on Intelligent Systems: Emerging Technologies, pp.202-210, USA, July 18-20, (2002).
- Soliman, H., Taysir, and Shin, Dong-Guk, "A Multi-Level hierarchical Mining Algorithm and Its Application to Biological Data," Proc. of MLDM 2003, Germany, July 5-7, (2003), (Accepted for publication).
- Soliman, H., Taysir, and Shin, Dong-Guk, "Associating Protein Characteristics to Gene Ontology Molecular Function by Utilizing Concept-Level Mining," Proc. of ISATED 2003, June 25-27, Austria, (2003).
- Soliman, H., Taysir, Tolba, M. F., Salem, A., and Hamad, A. H. "Analysis of Adaptive-H-Struct: An Algorithm for Mining Generalized Association Rules," 7th WSEAS Conferences on Computers, Greece, July 5-7, (2003) (Accepted for publication).
- Soliman, H. Taysir, Karam, H., Omar, El-Tawil, Yomna, Gamaly, A., Ibrahim, M., and Adel, M., "Analysis of Primers and Probes Techniques for Detecting Diseases," Proc. of the INFOS 2005 Conference, Faculty of Computer and Information Sciences, Cairo University, March (2005).
- Sharaf El Din Ahmed, Taysir H. Soliman, and Marwa Ghareeb, "Mutated Rules for Sequential Pattern Mining (MRS): An Efficient Evolutionary Sequential Pattern Mining Algorithm for Mining DNA Sequences," Euro-Mediterranean Medical Informatics and Telemedicine Conference (EMMIT 2006), Alexandria, Egypt, Feb. 26-28, 2006.
- Hisham Shishiny, Taysir H. Soliman, Ibrahim Emam, "Mining Drug Targets: The Challenges and A Proposed Framework," 11th IEEE Symposium on Computers and Communications, Italy, June 2006.
- M. Essam Khalifa, Taysir H. Soliman, Huda Amin Maghawry, "Hierarchical Overlapped Divisive Algorithm (HODA): Analysis and Implementation," 4th International Conference on Computer Science and Its Applications, (ISCCA 2006), June 2006, San Diego, USA.
- Heba Khaled, Hossam Faheem, Taysir H. Soliman, and Said Ghoneimy, "A Design of Parallel Architecture for Solving Exact Matching Problem on DNA Molecules," the 44th Rocky Mountain Bioengineering Symposium, April 13-18, 2007, Denver, CO, USA.

- M. Essam Khalifa, Taysir H. Soliman, Huda Amin Maghawry, "Validating HODA with Classical Clustering Techniques Using Microarray Gene Expression," The 2007 International Conference on Data Mining (DMIN'07), June 25-28, 2007, USA.
 - Marwa M Hussein, Taysir H. A. Soliman, Omar H. Karam, "GP-Growth: a New algorithm for Mining Frequent Embedded Subtrees," 12th IEEE Symposium on Computers and Communications, 2-4 July 2007, Portugal.
 - Marwa M Hussein, Taysir H. A. Soliman, Omar H. Karam, "Mining Frequent Induced Subtrees with Application to Phylogenetic Trees," IADIS International Conference on Data Mining, July 5-7, 2007, Portugal.
 - Nivine A. Helal, Taysir H. Soliman, and Omar H. Karam, "Analyzing Efficient Embedding List Structures in Subgraph Mining," IADIS International Conference on Data Mining, July 5-7, 2007, Portugal.
 - M. Essam Khalifa, Taysir H. Soliman, and Ayat Ali, "Reducing Protein-Protein Interaction Features via Scalable Approaches," International Journal of Intelligent Computing and Information Sciences, Faculty of Computer and Information Sciences, Ain Shams University, Vol. 7, Number 2, 2007.
 - Taysir Hassan A. Soliman, "Evaluation of Quality of Online Education via Frequent Pattern Mining," E-learning Excellence in the Middle East: Design, Define, and Deliver, UAE, January 2008.
 - Faheem Maghraby, Hossam M. Faheem, Taysir Hassan A. Soliman, and Zaki Taha, "A Multiagent Framework for Integrating Biological Data," International Journal of Intelligent Information Technologies, IGI Publishing, Vol. 4, No. 2, 2008.
 - Hisham El-Shishiny, Taysir Hassan A. Soliman, and M. El-Asmar, "Mining Drug Targets based on Microarray Experiments, IEEE Symposium on Computers and Communications," ISCC'08, Morocco.
 - T. H. Soliman, "BIOSNI: A Semantic Network Integration Approach for Biological Data," 4th International Biomedical Engineering Conference, Cairo, Egypt, 18-20, December 18-20, 2008.
 - Taysir Soliman, "Online Teaching/Staff Maturity Model," 7th WSEAS Conference on E-Activities, Cairo, Egypt, December 29-31, 2008.
 - Hosni M. Ibrahim, Taysir Hassan Soliman, and Hadia R. Ahmed, "Protein function annotation Based on analyzing hierarchical GO Information," Journal of Engineering Sciences, Faculty of Engineering, Assiut University, August 2010.
 - Taysir Hassan A. Soliman, Adel A. Sewissy, and Saddam H. Ahmed, "Utilizing CK Metrics Suite to UML Models: A Case Study of Microarray MIDAS Software," IEEE 7th International Conference Conference on Information and Systems (INFOS 2010), Cairo, Egypt, pp.1-8.
 - Taysir Hassan A. Soliman, Adel A. Sewissy, and Hisham Abdel Latif, "A Gene Selection Approach for Classifying Diseases Based on Microarray Datasets," Proceedings of the Third International Conference on Computer Technology and Development (ICCTD), Cairo, Egypt, November 25-27, 2011.
- Taysir Hassan A. Soliman, Marwa Hussein, and Mohamed El-Sharkawi, "Mining Disease Integrated Ontology," , IEEE 12th International Conference

on Bioinformatics and Bioengineering, Cyprus, pp.40-25, November 11-13, 2012.

- Taysir Hassan A. Soliman, Mostafa A. Elmasry, Abdel Rahman Hedar, and Magdy M. Doss, "Utilizing Support Vector Machines in Mining Online Customer Reviews," Proceedings of IEEE 22th International Conference on Computer Theory and Applications ICCTA 2012, Alexandria, Egypt, October, 2012.
- Mohammed H. Afif, Abdel-Rahman Hedar, Taysir H. Abdel Hamid, Yousef B. Mahdy , "Parameter determination of support vector machine using scatter search approach" Proceedings of IEEE 22th International Conference on Computer Theory and Applications ICCTA 2012, Alexandria, Egypt, October, 2012.
- Mohammed H. Afif, Abdel-Rahman Hedar, Taysir H. Abdel Hamid, Yousef B. Mahdy, "Support Vector Machines with Weighted Powered Kernels for Data Classification," Springer Advanced Machine Learning Technologies and Applications - First International Conference, AMLTA 2012, Cairo, Egypt, 369-378, December 8-10, 2012.
- Saddam H. Ahmed, Taysir Hassan A. Soliman, and Adel A. Sewisy, "A Hybrid Metrics Suite for Evaluating Object-Oriented Design," International Journal of Software Engineering, Vol. 6, No.1, pp.65-82, January 2013.
- Mohammed H. Afif, Abdel-Rahman Hedar, Taysir H. Abdel Hamid, Yousef B. Mahdy , "SS-SVM (3SVM): A New Classification Method for Hepatitis Disease Diagnosis ," International Journal of Advanced Computer Science and Applications, Vol. 4, No. 2, 2013.
- Taysir Hassan Soliman, M. A. Elmasry, A. Hedar, M. M. Doss, "Sentiment Analysis of Arabic Slang Comments on Facebook," International Journal of Computers & Technology, Vol. 12, No. 5, 2014.
- Ibrahim E El-Semman, Fredrik H Karlsson, Saeed Shoaie, Intawat Nookaew, Taysir H Soliman, and Jens Nielsen, "Genome-scale metabolic reconstructions of Bifidobacterium adolescentis L2-32 and Faecalibacterium prausnitzii A2-165 and their interaction," BMC Systems Biology, 8:41, 2014 (highly accessed).
- Taysir Hassan A. Soliman, "Mining Multi Drug-Pathways via A Probabilistic Heterogeneous Network Multi-labelClassifier," Bonfring International Journal of Research in Communic. Engineering, Vol. 4, No. 2, November 2014.
- Taysir Hassan A. Soliman, Ahmed Sharaf Eldin, Marwa M. Ghareeb, Mohammed E. Marie, "A Grammatical Inference Sequential Mining Algorithm for Protein Fold Recognition," (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 5, No. 12, 2014.
- Taysir H. A. Soliman, Khulood Al Ommar, Youssef B. Mahdy, " Developing Spatio-Temporal Dynamic Clustering Algorithms For Identifying Crime Hot Spots In Kuwait," Journal of Engineering Sciences Assiut University Faculty of Engineering, Vol. 43 No. 1, pp. 1 – 15, January 2015.

Experience

- Software Coordinator, IBM, Mclean, Virginia, USA, June-September 1990 (internship).

- Lab assistant, American University in Cairo, DPS division, Spring 1992.
- Demonstrator, Mathematics Department, Faculty of Science, Assiut University, August 1992-December 1996.
- Lab Assistant, American University in Cairo, Computer Science Department, Spring 1996.
- Assistant Lecturer, Information Systems Department, Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt, November 1996-December 2003.
- Traveled to the University of Connecticut on a channel basis in order to complete my research at the Artificial Intelligence Lab, January 2001-January 2003.
- Lecturer, Information Systems Department, Faculty of Computer and Information Sciences, Ain Shams University, Cairo, December 2003-January 2007.
- System Analyst, National Water and Savage Drain, November 2003-May 2004. Duties included analyzing the current data in order to make a full automation for document flow process at the National Water and Savage Drain, Cairo, Egypt.
- Project Assistant Manager, Partners/Internet Service Bar Project, funded from Microsoft Egypt, Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt, March-August 2004.
- Academic Staff, Mediterranean Virtual University, funded by the European Union, Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt, July 2004-September 2006. This project is to establish a Mediterranean Virtual University consisting of 11 partners, and the main coordinator is University of Strathclyde, Glasgow. Duties include designing online courses, designing course performance, and evaluating the quality of other partners' course performance and online courses as well.
- Vice President for the Quality Assurance and Accreditation Unit, Faculty of Computer and Information Sciences, Ain Shams University, Cairo, April 2006-September 2006.
- Visiting Scientist, IBM Center of Advanced Research Studies, Cairo Division, May 2005-May 2007.
- Lecturer, Information Systems Department, Faculty of Computers and Information, Assiut University, February 2007-May 31, 2009.
- Member of the Quality Assurance and Accreditation Unit, Faculty of Computer and Information, Assiut University, September 2007-present.
- Associate Professor, Information Systems Department, Faculty of Computer and Information, Assiut University, June 1, 2009-present.
- Head of Information Systems Department, Faculty of Computer and Information, Assiut University, Egypt, October 2009-present.
- Member of the CIQAP project, Faculty of Computer and Information, Assiut University, Egypt, Responsible for the Academic programs, October 2009-present.
- Vice Manager, E-learning Center, Assiut University, October 2009-present.
- Lecturer, ITI, Assiut Branch, Software Engineering Course, January 4-12, 2010.
- Supervisor of Bioinformatics Track, ITI, Assiut branch, September 2010-

July 2011.

- Responsible for the IT programs at the Genetic Engineering and Molecular Biology Research Center, Assiut University, 2011-2013.
- Supervisor of Geographical Information Systems Lab, Information Systems Department, Faculty of Computer and Information, Assiut University, October 2010-present.
- Supervisor of the Bioinformatics Research Group, Faculty of Computer and Information, Assiut University, October 2011-present.

Activities

- Participant at the International Exhibit, Marymount University, representing Egypt, 1987-1990.
- Editor of the International Newsletter, Marymount University, Fall 1989.
- Student Escort, Career Day, Marymount University, March 1990.
- Student Escort, ACM Computer Science Conference, Washington, DC, February 1990.
- Organizer, 1st Employment Fair of Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt, July 2000.
- Organizer, 4th Employment Fair of Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt, July 2003.
- Editor, Annual Report of Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt, November 2003.
- Editor at the Journal of the Faculty of Computer and Information Sciences, Ain Shams University, Cairo, Egypt, December 2003.
- Participant in First Aalborg University MVU project workshop, Aalborg, Denmark, December 12-19, 2004.
- Participant in MVU meeting in Cairo, Ain Shams University, January 31-February 2, 2005.
- Participant in E-tutor diploma face-to-face workshop, Cyprus, June 27-28, 2005.
- A Special Session Organizer on Computational Biology and an Organizer in the Organizing Committee, Second International Conference on Intelligent Computing and Information Systems, Faculty of Computer and Information Sciences, Ain Shams University, March 5-7, 2005.
- A participant on the Molecular Biology and Biotechnology Workshop, Genetic Engineering and Biotechnology Research Center, Dec. 11-15, 2005.
- A participant on the Bioinformatics session, Second International Conference on Scientific Research and Applications, Marriott, Cairo, Dec. 19, 2005.
- A reviewer in the IASTED international committee for computer science and applications, August 2005-present.
- An organizer of the Third Tutor Workshop, April 26-27, 2006, Ain Shams University, Cairo.
- A presenter, 4th International workshop on GIS and Its Applications, Assiut University, April 2007.
- A presenter, 6th International Conference on Scientific Research, women, and development in Upper Egypt (Arab Women and Health), Assiut University,

April 17-19, 2007.

- A poster presenter, Biovision Alexandria, Alexandria Library, April 13-17, 2008.
- Leader of the Student Scientific Committee of the Student Union, Faculty of Computer and Information, Assiut University, September 2008-present.
- Leader of female students, Faculty of Computer and Information, Assiut University, May 2009-present.
- Attended Universities' self-evaluation training, Held by the National Authority for Quality Assurance and Accreditation for Education, Assiut University, November 7-11, 2009.
- Attended External reviewers training, Held by the National Authority for Quality Assurance and Accreditation for Education, Assiut University, November 15-19, 2009.
- Attended "Best Practices in Education" Workshop, Held by the National Authority for Quality Assurance and Accreditation for Education, Shobra El-Khema training center, December 1-3, 2009.
- Member of IEEE Computer society, 2011-present.
- Member of ACM, 2012-present.
- Attended the TOT prep level (TOT55), NCFLD and succeeded, April 28-May 3, 2012.
- Attended EMC² Academic Alliance training for Egyptian Academic staff on Cloud Computing Infrastructure, Feb 2-9, 2014, EMC², Cairo, Egypt.
- EMC² Focal point at Assiut University, Fall 2014- present
- Representative of Assiut University, BioDialog Project with Fredrich Schiller University, Jena, January 2015-present.

References

- Available upon request