Hany Ahmed Sayed Mansour

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PROFESSIONAL EXPERIENCE

June, 2017 – till present

Research and Development Department Manager:
The Engineering Company for Digital Systems Development (RDI)
www.rdi-eg.com

August, 2014 – June, 2017

Research team leader: The Engineering Company for Digital Systems Development
www.rdi-eg.com

August, 2013 – August, 2014

Senior Machine Learning Researcher: The Engineering Company for Digital Systems Development
www.rdi-eg.com

September, 2010 – August, 2013

Research Assistant: American University in Cairo (AUC)
School of Sciences and Engineering (SSE)
Electronics and Communications Department
www.aucegypt.edu

EDUCATION

2018 - till present **Ph.D. in Electronics and Communications Engineering**
Department of Electronics and Communications Engineering,
Faculty of Engineering, Cairo University.

2013-2016 **Master of Science in Electronics and Communications Engineering**
Department of Electronics and Communications Engineering,
Faculty of Engineering, Cairo University.

2005-2010 **Bachelor of Electronics and Communications Engineering**
Department of Electronics and Communications Engineering,
Faculty of Engineering, Cairo University.

PUBLICATIONS

Book Chapter

Sherif Abdel Azeem, Hesham M. Eraqi and Hany Ahmed. Springer, *Guide to OCR for Arabic Scripts: On-line Arabic Handwritten Words Recognition based on HMM and Combination of On-line and Off-line Features*. Berlin: Springer, 2012.

International Journals

Abdallah, Mustafa, Ashraf Mahgoub, Hany Ahmed, and Somali Chaterji. **Athena: Automated tuning of k-mer based Genomic error correction Algorithms using Language Models**. Nature Scientific reports 9, no. 1 (2019): 1-13.

Hany Ahmed and sherif abdel Azeem. *Effective technique for the recognition of offline Arabic handwritten words using hidden Markov models*. International Journal on Document Analysis and Recognition (IJDAR), February 2013.

International Conference Papers

1. Hany Ahmed, Mohamed Elaraby, Abdullah M. Moussa, Sherif M. Abdou and Mohsen Rashwan. *An Unsupervised Speaker Clustering Technique based on SOM and I-vectors for Speech Recognition Systems.* In proceedings of WANLP 2017 (co-located with EACL 2017).

2. Ahmed Magooda, Amr M. Sayed, Ashraf Y. Mahgoub, Hany Ahmed, Mohsen Rashwan, Hazem Raafat, Eslam Kamal and Ahmad A. Al Sallab. *RDI_Team at SemEval-2016 Task 3: RDI Unsupervised Framework for Text Ranking.* In proceedings of SemEval-2016, San Diego, California, June 16-17, 2016.

3. Mohamed Fawzi, Mohsen A. Rashwan, Hany Ahmed, shaimaa Samir, Sherif M. Abdou, Hassanin M. Al Barhamtoshy, and Kamal M. Jambi. *Rectification of Camera Captured Document Images for Camera - Based OCR Technology.* In proceedings of 13th International Conference on Document Analysis and Recognition(ICDAR), CBDAR Workshop 2015.

4. Sherif Abdel Azeem and Hany Ahmed. *Combining Online and Offline Systems for Arabic Handwriting Recognition*. In proceedings of the 21st International Conference on Pattern Recognition(ICPR2012),November 2012, Tsukuba International Congress Center, Tsukuba Science City, Japan. IEEE Computer Society.

5. Sherif Abdel Azeem and Hany Ahmed. *Off-Line Arabic Handwriting Recognition system based on concavity features and HMM classifier*. In proceedings of the 21st International Conference on Pattern Recognition(ICPR2012),Tsukuba International Congress Center, November 2012, Tsukuba Science City, Japan. IEEE Computer Society.

6. Hany Ahmed and Sherif Abdel Azeem. *Online Arabic Handwritten Digits Recognition*. In proceedings of the 11th International Conference on Frontiers in Handwriting Recognition (ICFHR 2012),September 2012, Bari, Italy. IEEE Computer Society.

7. Sherif Abdel Azeem and Hany Ahmed. *Effective Technique for the Recognition of Writer Independent Off-line Handwritten Arabic Words*. In proceedings of the 11th International

Conference on Frontiers in Handwriting Recognition (ICFHR 2012), September 2012, Bari, Italy. IEEE Computer Society.

8. Sherif Abdel Azeem and Hany Ahmed. *On-line Arabic Handwriting Recognition System based on HMM*. In proceedings of the 11th International Conference on Document Analysis and Recognition (ICDAR2011), Beijing, China. IEEE Computer Society.

9. Sherif Abdel Azeem and Hany Ahmed. *Recognition of Segmented Online Arabic Handwritten Characters of the ADAB Database*. In proceedings of the 12th International Conference on Machine Learning and Applications (ICMLA2011), Hawaii, USA, IEEE Computer Society.

CONFERENCES

·   Attended the 13th International Conference on Frontiers in Handwriting Recognition 2012, Bari, Italy.

·   Attended the International Conference on Machine Learning and Applications 2011, HAWAII, USA.

RELEVANT RESEARCH EXPERIENCE & PROJECTS

2018-2019   **Kateb: www.rdi-kateb.com, Arabic Automatic Speech Recognition**

2019   **Hafss: www.rdi-hafss.com, Computer aided pronunciation/recitation learning for Quran using speech recognition techniques.**

2018-2019   **Araa: www.rdi-araa.com, Sentiment analysis for Arabic social media.**

2018-2019   **Sotoor: www.rdi-sotoor.com, Optical Character Recognition software package that converts scanned images of Arabic documents into a fully editable and searchable text file**

2018   **Voice conversion using parallel and non-parallel data**

2017-2018   **Arabic Large Vocabulary Speech Recognition system for call-centers**

2017-2018   **Sentiment Analysis for Social Media**

2016-2018   **Historical Arabic Handwritten Books Recognition**

2016-2018   **Arabic Large Vocabulary Speech Recognition system for broadcast news and shows**

2015-2018   **Arabic Typewritten Recognition for computer-printed Books/Papers**

2015-2016   **Labeeb - Automatic Arabic Speech Recognition for deaf people**

2015   **Historical Arabic Typewritten Books Recognition**
2013-2014   **Online Arabic Handwriting Recognition System for smart phones**
2010-2013   **Proposed novel research techniques for Arabic Handwriting Recognition**

2010   **AraBot- The Egyptian Waiter Robot**
A moving robot at (ex: restaurant, cafe ...) which is able to recognize customer's speech (In Arabic language) and interact with what they are telling.

HONORS AND AWARDS

The Multi-GenreBroadcast (MGB5) Challenge- Arabic Track
MGB-2019 Challenge (https://arabicspeech.org/mgb5)
-Ranked first in the international Multi-Genre Broadcast Challenge.

RASM2019
ICDAR2019 Competition on Recognition of Historical Arabic Scientific Manuscripts
(https://www.primaresearch.org/RASM2019/results)
-Ranked first in RASM-2019 Challenge.

RASM2018
ICFHR2018 Competition on Recognition of Historical Arabic Scientific Manuscripts
(https://www.primaresearch.org/RASM2018/results)
-Ranked first in RASM-2018 Challenge.

The Multi-Genre Broadcast (MGB3) Challenge- Arabic Track
MGB-2017 Challenge (http://www.mgb-challenge.org/arabic.html)
-Ranked third in the international Multi-Genre Broadcast Challenge.

The Multi-Genre Broadcast (MGB2) Challenge- Arabic Track
MGB-2016 Challenge (http://www.mgb-challenge.org/arabic.html)
-Ranked sixth in the international Multi-Genre Broadcast Challenge.

The international Semantic Evaluation (SemEval) Competition
SemEval-2016 (10th International Workshop on Semantic Evaluation, SemEval '16, San Diego, CA)
-Ranked third in the semantic evaluation competition, SemEval- 2016: Task 3, unsupervised framework for text ranking.

The international online handwritten Arabic word recognition systems competition
ICDAR `11 (11th International Conference on Document Analysis and Recognition, 2011)
-Ranked second in the online handwritten Arabic word recognition systems competition.

EED9 Best Project
Egyptian Engineering Day 2010 (EED9)
-Ranked first in the Egyptian Engineering Day Competition.

SAMSUNG Real Dreams Award (SRDA)
SAMSUNG
-SRDA 2010 Winner for the best project.

Young Innovators Award (YIA)
Nahdet El Mahrousa Society 2010
-YIA 2010 winner for the best project.