

"[Yasser Moustafa Kamal, Ph.D.]"

CURRICULUM VITAE

For

Yasser Moustafa Kamal (Ph.D.)

Curriculum Vitae @ 2018

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"[Yasser Moustafa Kamal Ph.D.]"

Personal Data	Name:	Yasser Moustafa Kamal
	Date Of Birth:	22/9/1973, Dakahlia, Egypt
	Address:	Egypt, Cairo Governorate, New Cairo, 5 th Settlement, 5 th District, street No. 35, behind, Akhnaton Language School, building No. 230, apartment No. 6
	Marital Status:	Married, have two Girls and one boy.
	Nationality:	Egyptian
	Mailing address:	Egypt, Cairo Governorate, New Cairo, 5 th Settlement, 5 th District, street No. 35, behind, Akhnaton Language School, building No. 230, apartment No. 6
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	E-Mail:	dr_yaser_omar@yahoo.com
	Date Of Grad.:	30-06-1996
	Specialization	Electrical Engineering - Computer Eng.
Education	<p>Doctorate of Philosophy (Ph.D.) University Name: Cairo University, Faculty of Engineering Town, Country : Giza, Egypt 2002-2006</p> <p>Master of Electrical Engineering University Name: Military Technical Collage Town, Country : Cairo , Egypt 1999-2001</p> <p>Bachelor of Electrical Engineering University Name: Military Technical College Town, Country : Cairo , Egypt 1991-1996</p> <p>Belcas Secondary school, Math Major High School Name: Belcas Secondary school Town, Country: Dakahlia, Egypt 1988-1991</p>	
M. Sc. Study	<p>“Analysis of Medical Images for Diseases Diagnosis”</p> <p>This thesis focuses on the determination of cornea condition based on the analysis of cornea endothelium tissue image. The human cornea is about 500 microns thick. At the posterior side of the cornea is situated a single,</p>	

	<p>connected layer of endothelial cells. These cells are polygonal in shape. They are about 20 microns across and about 4 microns thick. These cells are not regenerated. Any cell dies due aging or any external reason like surgical, will cause a gap in the endothelium tissue and the surrounding neighbor cells will elongate to fill this gap. The analysis of endothelium cells includes counting the number of cells and determining the size distribution. The thesis proposes a robust and accurate method for analysis grayscale images. First, the cornea image is prepared by using a simple morphological filter to remove the noise. Second, a unique marker for each cell is extracted using a morphological reconstruction technique. Third, a recursive algorithm for counting these markers is used to determine the number of cell. Finally, the watershed algorithm is applied, with a novel technique to overcome the even distance problem in the traditional algorithm, to determine the size distribution of the cells.</p>
<i>Ph.D. Study</i>	<p>" Analysis of Colored Retinal Images for Retinal Diseases Diagnosis "</p>
	<p>This thesis explored methods towards the development of an automated decision support system for the purpose of detecting the condition of color retinal image.</p> <p>The proposed system starts with extracting ROI from the whole entire image to prevent influence of the image borders on the other proposed algorithms. Extracting ROI is based on the fact that the corners of the image contain seeds for the region outside ROI; so an iterative process starting with these seeds and flooding toward the borders of ROI is implemented using queue technique.</p> <p>It is essential for any automatic diagnostic system to be able to provide a way for evaluating quality of the processed image. In this thesis a new formula is presented for evaluating quality of retinal image based on their contrast. Also, an enhancement is introduced to the previous method for evaluating quality based on histogram template by storing bad, fair and good quality rather than good only. Also a method for increasing contrast in bad quality image is implemented in the proposed system.</p> <p>Extracting vascular tree represents a valuable factor in any automatic diagnostic system. Through this dissertation a novel method is introduced for extracting vascular tree which combines advantages of previous techniques for extracting vascular tree. Also analyzing extracted vascular tree is implemented in the proposed system through locating characteristic points, determining vessel tortuous and calculating vessel width.</p>

	<p>Locating optic disc, cup disc and fovea plays an important role for any diagnostic system. A new technique is implemented in this dissertation for locating optic disc, cup disc and fovea.</p> <p>The core of proposed system is to validate existence of lesions in the processed image. Through this dissertation a method for extracting candidate areas of lesions based on morphological technique is implemented. After that, a set of features that covers as can as possible a wide range is extracted for each candidate area. The features selection stage includes developing novel formulas for determining new features such as reddish, whitish, and yellowish. Also a three different techniques, PCA, ICA, Fisher Discrimination, and, combining of them, for extracting best features from selected features are validated. The experimental results show the best results obtained by starting with Fisher Discrimination followed by ICA as a pre stage before applying NN. And it is better to build a NN architecture for each type of lesions. Also, the experimental results show the order of validating lesions should starts first with exudates, followed by Haemorrhages, and finally Cotton Wool Spots.</p>
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Academic Position

1997-2005	Senior Instructor in VB, DB, Access, Java, ICDL certificate Assembly Lang, C++, SQL Server, C # For: -Military Technical College. -Modern Academy in Maadi. -MTI in Maadi. -Future Academy.
2006-2007	Lecturer for Information System in Modern Academy in Maadi.
2006-2007	Lecturer for Object Oriented Programming in MTI in Maadi
2007-2008	Lecturer for Information Technology for MTI in Maadi
2008-2012	Lecturer for Information System Design & Implementation, Database I, Database II, and, Conceptual Foundation for MTI in Maadi

2012-2013 Lecturer for Web-Page Design & System Analysis in Future University.
Teacher for Information Technology Theory & Practice, Data Structures &
Communication Systems & Micro Processor In Arab Academy for
Science, Technology and Maritime Transport, & Giza Engineering
Institute.

2012-2013 Lecturer for post graduate courses: "Information Theory" & "Multimedia
Information Systems" and Supervision of MSC students in Arab Academy
for Science, Technology and Maritime Transport, & Giza Engineering
Institute.

2013- 2014 Lecturer for Computer Skills in Najran University, Preparatory-
Year (Through Education Expert Company)

2014- 2014 Lecturer for Information Technology for Business in BUE in Cairo.

2014- till Now Lecture for Advanced Programming (Java), Artificial Intelligence(using
Prolog), Data science & Big Data, Embedded System, Computer Graphics, Advanced
Database, Datamining, Software Agents, Computing Algorithms and Computer Architecture In
Arab Academy for Science, Technology and Maritime Transport.

PROFESSIONAL EXPERIENCE

2016 till now HoD of Computer Science College of Computing & Information Technology in
AASTMT.

2015- 2016 Vice Dean for Training & Service Community College of Computing & Information
Technology in AASTMT.

2014- 2015 Instructor in Arab Academy for Science, Technology and Maritime Transport
College of computing and information technology

2012- 2014 Instructor in Giza Engineering Institute.

2005- 2012 Research and Development - Medical Services Administration – Egyptian Armed
Forces

2002-2005 Teaching Assistant
Systems and Biomedical Engineering Department, Military Technical college , Egypt

1996-2002 Developer & researcher -Research and Development in medical services

	administration
2005 -2012	Head of IT in Matrix Company for ERP software solutions (www.axiomsys.net)
2012-2014	Head of IT of BuduCloud for developing brilliant business management applications http://www.buducloud.com/

Other Training & Certification:

2008	MCP in SQL Server 2005
2003	Training program for Biological Detection and Identification held in Canada & USA.
2002	Training program for Service of Whole Body X-ray CT Scanner Asteion Single held in Japan

SYSTEM DEVELOPMENT:

- 1996: Building S/W package for simulating shooting system using laser.
- 1999: Building a s/w package for hearing audiometer system.
- 2010: LiverTrans, "3D workstation for preoperative planning in liver transplantation".
- 2013: Building software that manages Smart Electric Meters (MDM) EISweedy Company.

Google Scholar Link: <https://scholar.google.com/citations?user=VILtQusAAAAJ&hl=en>

Published Paper

Journal Papers

1. EL-Sayed Orabi, Mostafa A, M. Assal, Yasser Kamal "Designing and Building a Framework for DNA Sequence Alignment Using Grid Computing "International Journal of Advanced Computer Science and Applications, Vol. 5, No. 9, 2014.
2. Ayman M Nabil, Yasser M Kamal " Automated Road Extraction using Two Layer Cellular Neural Network" IJRET Vol. 4, No. 2, 2016 ISSN 2277-4378 Pp. 97: 100.
3. Yasser M.K. Omar, Hoda Osama ,Amr Badr " **Double Hashing Sort Algorithm**" Journal Computing in Science and Engineering, ISSN: 1521-9615, Issue No. 02 - Mar.-Apr. (2017 vol. 19) pp: 63-69 DOI Bookmark: <http://doi.ieeecomputersociety.org/10.1109/MCSE.2017.26> (Impact Factor 1.729)
4. Mahmoud F. Abd Elzaher , Mohamed Shalaby , Yasser Kamal , Salwa El Ramly "**Securing digital voice communication using**

non-autonomous modulated chaotic signal " Journal of Information Security and Applications, ISSN: 2214-2126, April 2017

Conference Papers

5. EL-Sayed Orabi, Mostafa A, M. Assal, Yasser Kamal "DNA Fingerprint Using Smith Waterman Algorithm by Grid Computing", International 9th Conference on Informatics and Systems INFOS 2014,15-17 Dec 2014 Cairo
6. Mohamed Shalaby, Yasser Kamal" Grid Computing-based Sequence Alignment", 2014 International Conference on Bioinformatics & Computational Biology, July 21-24, 2014, Las Vegas, Nevada, USA
7. Mohamed Shalaby Yasser M. Kamal "Weak mutually unbiased bases versus mutually unbiased bases in terms of t-designs" QIPC2015 Leeds University.
8. AM Sobhy, Yasser M Kamal, AZ Ghalwash Automatic Extraction of Main Thesis Documents Fields Using Decision Trees 2015 International Conference on Computational Science and Computational Intelligence (CSCI).
9. Ahmed Abdel Moneim Kamal, Yasser M. Kamal Omar, Atef Zaki Ghalwash "Simultaneous Mapping of Multi RDB to RDF IEEE "7th International Conference on Computer Science & Information Technology (CSIT 2016) Amman-Jordan 13-14 July 2016
- 10.Hoda Osama, Yasser Omar and, Amr Badr "Mapping Sorting Algorithm" IEEE -SAI Computing Conference 2016 London, UK 13-15 July 2016.
11. Karim Orabi, Yasser Moustafa Kamal, Thnae Mohamed "Early Predictive System for Diabetes Mellitus Disease" 16th Industrial Conference on Data Mining ICDM 2016 July 13-17, 2016, New York, USA
12. Sameh Ibrahim, Yasser Omar , Walid Mohamed "Assembly of Shredded Pieces Depending on Distance and the Angle Change"IEEE Conference Record No. #40705, AMC 2016 Kota Kinabalu, Sabah (Malaysia) 5 - 7 December 2016 <http://uksim.info/amc2016/amc2016.htm>.
13. Marwa M. Yasser K. Omar, Mai M. " Identifying Genetic Biomarkers

Associated to Alzheimer's Disease Using Support Vector Machine" 2016
8th Cairo International Biomedical Engineering Conference (CIBEC 2016)
15-17 Dec 2016.

14. Ghada Nady, Yasser M. K. Omar "Selection of the Best Despeckle Filter of Ultrasound Images" The Second International Conference on Multimedia and Image Processing (*ICMIP 2017*) Mar 17-19, 2017 in Wuhan China.
15. Mohamed Shalaby, Yasser M. Kamal "Quantum Key Distribution for Composite Dimensional Finite Systems" International Conference of Applied Mathematics and Computer Science ICAMCS Jan 27-29 2017 in Rome Italy.
16. Mahmoud F. AbdElzaher*, Mohamed Shalaby, Yasser M. Kamal "Speech Cryptosystem Based On Chaotic Modulation Technique" The Sixteenth Conference on Language Engineering (ESOLEC'2016) December 7-8, 2016 in Faculty of Engineering –Ain Shams University Cairo, Egypt
17. Maiada M. Shabaan, Haitham S. Hamza, Yasser M. K. Omar "Effects of FSM Minimization Techniques on Number of Test Paths in Mobile Applications MBT" SERA 2017 6-10 June 2017 in London .
18. Nada M., Haitham S. Hamza, Yasser M. K. Omar " Understanding the Impact of the Ontology Matching Tools on Validation the Feature Model with Domain Knowledge" The Twenty-Ninth International Conference on Software Engineering and Knowledge Engineering, Jul 5, 2017 - Jul 7, 2017 Pittsburgh, PA 15238 USA.
19. Ahmed. M., Yasser M. K. Omar, Amr Badr "Initial Centroid Selection Optimization for K-means with Genetic Algorithm to Enhance Clustering of Transcribed Arabic Broadcast News Documents", Computational Methods in Systems and Software 2017 Faculty of Electrical Engineering, West Pomeranian University of Technology, Szczecin, Poland September 12, 2017 - September 14, 2017 Springer.
20. Ahmed Mohammed Yousef; Yasser Omar; and Essam Fakharany "Deep Generative Image Model using a Hybrid System of Generative Adversarial Nets (GANs)" IEEE-5th International Conference on ADVANCED

CONTROL CIRCUITS AND SYSTEMS (ACCS'017) 5-8 November
2017, Sheraton Montazah Hotel, Alexandria, Egypt

**Research
Activities**

**Field of
Interest and
Special
Skills**

- Data Science.
- Artificial Intelligence.
- 3-D Imaging reconstruction, visualization and Measurements.
- Computer interface with biomedical instrumentations.
- Data Mining, Machine Learning, Pattern Recognition.
- Bioinformatics.
- Modeling and Simulation.

Computer Skills

- Efficiency in using Matlab, R lang.
- Efficiency in Java.
- Efficiency in Prolog.
- Efficiency in using C#, C++, Python, VTK, ITK.
- Efficiency in using Database Oracle, SQL, PL/SQL.
- Efficiency in using PHP, Javascript, HTML5, CSS.

Languages

- Native speaker of Arabic.
- Fluent in English.

The names & the contacts of three references:

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1. Prof. Mustafa Abdelazem (Dean of CCIT) :
Email: melbakary@aast.edu
 2. Prof. Walid M Fakar (HoD of Computer Engineering College of Engineering AAST).
Email: waleedf@aast.edu
 3. Prof. Ahmed Badwii (HoD of Biomedical Engineering Cairo University
Email: ambadawi99@hotmail.com