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Senior Lecturer, IS Department (FCI-ZU), Smart University Project Coordinator @ Zagazig University, Training Unit Manager (FCI-ZU).

Education

- Jan 2010 - Jan 2015 PhD
University of Leicester
My research in the PhD is focused on the problem of business processes compliance checking with standards for improvements and quality assurance. I used Model Checking, Maude, BPMN, LTL, and CMMI as the basic tools and techniques towards my contributions. My PhD was funded by the Egyptian government. My thesis is available online from [here](#).
- Jul 2012 - Jul 2012 Summer Graduate School
International School on Rewriting
I attended the ISR graduate school after a recommendation from my PhD supervisor. My PhD research is based on term rewriting logic and Maude programming language. These were the motivations to go for it and attend the beginners track. I was pleased to be taught by Prof. [José Meseguer](#) and other experts in the field.
- Mar 2010 - Apr 2010 Graduate School
Midlands Graduate School
MGS basically contains a collection of intensive courses in principal courses in computer Science, such as Functional Programming, Lambda Calculus. That was one of the preparation courses for my PhD which although I didn't use them directly in my own research, I used them to understand other work in the same area of research.
- Sep 2005 - Aug 2009 MSc by research
Cairo Univesity
A research-based MSc. degree in Information Systems. I had to write a thesis in about 150 pages with the topic, A Method and Tool Support for Software Architecting Activities. I have published it later on as a book available to buy on Amazon with the same title.
- Sep 2000 - May 2004 BSc
Zagazig University
I got my BSc from Information Systems department in the Computers and Information Faculty. It was a four year study based on courses and term exams. I was the first of a class of 137 undergraduates, and then I got the job as an assistant lecturer in my department. This was also the reason for me to get the PhD scholarship to the UK sponsored by the Egyptian government.

Work experience

- April 2015 - present Lecturer
Faculty of Computers and Informatics, University of Zagazig (FCI-ZU)
Information Systems Department
- Sep. 2016 - Sep. 2018 Information Systems Department Council Secretary

Faculty of Computers and Informatics, University of Zagazig (FCI-ZU)

- June 2018 - Nov. 2018 External Liaison Officer
Faculty of Computers and Informatics, University of Zagazig (FCI-ZU)
I led the communication between the faculty from one side and the IT companies in Egypt on the other side aiming at providing the students with the most beneficial training opportunities supervised by the faculty.
- May 2017 - May. 2018 Undergraduate Training Coordinator
Faculty of Computers and Informatics, University of Zagazig (FCI-ZU)
I supervised and coordinated the summer training for 360 students in their third year and 450 in their second year by cooperating with MCIT-ITI and IBM Egypt through August and September 2017. This project yields having 85% of the students being certified.
- Sept. 2016 - Sept. 2017 Training and Continuing Education Unit Manager
CITC - University of Zagazig
In the heart of the University of Zagazig is the Communications and Information Technology Center (CITC). The main role was to manage and build up the unit bylaw and main structure and infrastructure assets. Moreover, preparing and monitoring the training unit activities. While in the CITC, I helped in the migration of the university MIS system from an old local information system running by one individual to a new Ministry-connected effective MIS system which is running through faculties with different levels of authorities within the faculty and the university. Meanwhile, I proposed a project to accredit the CITC development activities with CMMI through ITIDA (<http://www.itida.gov.eg/En/Pages/home.aspx>).
- Jan 2005 - Mar 2015 Assistant Lecturer
University of Zagazig
I joined work in the department of Information Systems after graduation. It was started by helping teaching in the labs and small group projects in a direct contact with the undergraduate students. This allows me to get an experience in dealing with different type of students and assigning each one the task which is more suitable to their skills and personality. I have been organizing the module contents with the lecturers, and make sure the students have done their best accomplishing their assignments and projects. Most of the projects are software development, which requires me to be quite professional in using the tools and the applications too.
- Nov 2014 - Mar 2015 Leicester Award E-Moderator
University of Leicester
Mentoring students' online assignments. This is basically in the context of improving students soft and communication skills.
- Sep 2013 - Apr 2014 Leicester Award Associate Tutor
University of Leicester
[The Leicester Award for Employability](#) is an experiential career development program designed to help students develop, assess, recognize and record the employability skills they are gaining through extra and co-curricular activities. My role was basically marking and giving feedback on student's assignments during the experience.
- Mar 2013 - May 2013 Science Teacher
Saudi School in Leicester
I was teaching science subjects, e.g. Chemistry, Physics, and Biology and Geology to Arab secondary school students. They study the same Arabic subjects and have to pass an exam to get the Arabic certificate, so they can go and join the school/university later on in their country.
I was responsible for 25 students in total, who I helped them understand the subjects and practice exam-like questions to be prepared for the final exams. I enjoyed every bit if it.
Read my blog post about [teaching young people](#).
- Feb 2010 - Apr 2010 Science Teacher

Saudi School in Leicester

I was teaching science subjects, e.g. Chemistry, Physics, and Biology to Arab secondary school students. They study the same Arabic subjects and have to pass an exam to get the Arabic certificate, so they can go and join the school/university later on in their country.

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Jun 2008 - Aug 2008

ICDL Instructor

[Zagazig University](#)

I was teaching people from different backgrounds (and ages) how to use the computers and get the International Computer Driving License (ICDL). The certificate requires the student to pass several exams in different MS Windows and Office usage.

Jun 2005 - Aug 2005

Instructor

[University of Alexandria](#)

I worked as an instructor during the summer 2005 in the department of production engineering in the faculty of Engineering, University of Alexandria, Egypt. I taught undergraduates two courses as part of their summer training. The courses were lab-based, so I was presenting and explaining then helping the students with their applications. The courses are:- Introduction to Oracle9i: SQL. (Two Courses)- Project Management using Primaveraj. (Two Courses)

Publications

- Mona Mohamed, Nissreen El-Saber. (2023). [Intelligent Decision Support Machine Learning Based Optimizing Inventory Management](#). American Journal of Business and Operations Research, 9 (2), 41-50.
- Mona Mohamed, Nissreen El-Saber, [Prioritization Thermochemical Materials based on Neutrosophic sets Hybrid MULTIMOORA Ranker Method](#), Neutrosophic and Information Fusion 2 (1), 08-8-22, <https://www.americaspg.com/articleinfo/39/show/1669>
- Khalid A. Eldrandaly, Nissreen El Saber, Mona Mohamed, Mohamed Abdel-Basset, [Sustainable Manufacturing Evaluation Based on Enterprise Industry 4.0 Technologies](#), *Sustainability* 2022, 14(12), 7376; <https://doi.org/10.3390/su14127376>
- Khalid A. Eldrandaly, Mona Mohamed, Nissreen El-Saber, and Mohamed Abdel-Basset, [An assessed framework for manufacturing sustainability based on Industry 4.0 under uncertainty](#), *Neutrosophic Sets and Systems*, Vol. 49, 2022, pp. 561-578. DOI: 10.5281/zenodo.6466518
- M. Abdel-Basset, A. Gamal, N. Moustafa, A. Abdel-Monem and N. El-Saber, [A Security-by-Design Decision-Making Model for Risk Management in Autonomous Vehicles](#), in *IEEE Access*, vol. 9, pp. 107657-107679, 2021, doi: 10.1109/ACCESS.2021.3098675.
- Abdel-Basset M, Gamal A, Chakraborty RK, Ryan M, El-Saber N., [A Comprehensive Framework for Evaluating Sustainable Green Building Indicators under an Uncertain Environment](#). *Sustainability*. 2021; 13(11):6243. <https://doi.org/10.3390/su13116243>
- Abdalla Attia Seif and Nissreen El-Saber. 2017. [Scalable Distributed-Computing IoT Applied Architecture with Semantic Interoperable Gateway](#). In Proceedings of the 3rd Africa and Middle East Conference on Software Engineering (AMECSE). DOI: 10.1145/3178298.3178306
- Nissreen El-Saber and Artur Boronat. 2014. [BPMN Formalization and Verification using Maude](#). In Proceedings of the 2014 Workshop on Behaviour Modelling-Foundations and Applications (BM-FA '14). ACM, New York, NY, USA, , Article 1 , 12 pages. <http://doi.acm.org/10.1145/2630768.2630769>
- Nissreen El-Saber, [A Method and Tool Support for Software Architecting Activities](#). LAP Lambert Academic Publishing. ISBN-10: 3843374155. ISBN-13: 978-3843374156.
- Galal-Edeen, G. H., Shouman, M. A., & El-Saber, N. A. (2009). [A Model for Re-architecting Frameworks](#). International Journal of Software Engineering (IJSE), 2(2), pp: 44-63.
- Galal Hassan Galal-Edeen, Mohamed Abbas Shouman, Nissreen A. El-Saber. [Approaches to Software Re-architecting](#). In 37th International Conference on Computers and Industrial Engineering proceedings- Volume 1- (CIE37); 10/2007

Research Interests

- Model-Driven Engineering
- Business Processes Modelling and Management, BPMN
- Maude Applications, Model Checking
- Software Quality Assurance Models; CMMI, Configuration Management, Compliance
- Software Architecture
- Cloud Computing
- Big Data

- Digital Health

Conferences

Technical Committee Member in AMECSE 2016, 2017 and 2018 (<http://amecse-conferences.org/>)

Certifications

Feb 2022 - Feb 2022	COBIT 2019 Foundation Certification <i>ISACA</i> COBIT, by ISACA , is a framework for enterprise governance of IT.
Oct 2021 - Oct 2021	TOGAF® 9 Part 1 Certification <i>The Open Group</i> The TOGAF® Standard , a standard of The Open Group, is the open Enterprise Architecture standard used by the world's leading organizations to improve business efficiency.
Feb 2017 - Feb 2017	Big Data Developer Mastery Award <i>IBM</i>
July 2016 - July 2016	Big Data Specialist with IBM BigInsights V2.1 <i>IBM</i>
Sept 2015 - Sept 2015	Dell EMC Cloud Infrastructure and Services Certificate <i>Dell EMC</i>
Apr 2008 - Apr 2010	IELTS <i>The British Council, Egypt</i> I scored 7.5 in total.
Jun 2003 - Aug 2003	Summer Training Certificate <i>Institute of National Planning</i>
Jun 2002 - Aug 2002	Summer Training <i>Agiba Petroleum Company</i>

LaTeX

LaTeX is a document markup language and document preparation system for the TeX typesetting program. I wrote my PhD thesis and my recent papers and presentations using LaTeX.

Linux Operating System

It is my favourite operating system and started to use in the beginning of my PhD and decided to have it on my own PC and laptop. Most of my PhD applications are based on Linux.

Microsoft Office

Eclipse

I started to use eclipse when I was supervising some group projects in Egypt and then in my Masters as the main platform for Java applications to retrieve an open source project architecture. Recently, I'm using its plugins for Maude, BPMN editor, Java Swing Apps.

Oracle Forms

I worked on Oracle 9 forms in my undergraduate graduation project. The project was a resource scheduling and allocation software.

Maude

Maude is a logical language based on rewriting logic. I'm currently using Maude as a formalization language for business processes as part of my PhD project. read more at: [Maude](#)

Projects

El-Sharkia Governance Cleaning Fees Collection Information System Analysis and Design (March 2006) Analysis and Design of a network information system for El-Sharkia governance to help in gathering the fees of Cleaning inside Zagazig city. The project was under the supervision of the Faculty of Computers and Information – Zagazig University. **Tools:** Oracle 10g Database, Oracle Developer 9i

Heuristic Multiple Resources Scheduling Techniques for Project Management (March 2005) A Software tool that helps the decision makers get the best scheduling for their project and plan for the optimal usage of available resources according to project data. This tool can solve single and multiple project resources according to 55 complex heuristic rules. **Tools:** Visual Basic 6.0, MS Access 2003, Photoshop 6.0

Management Information System for Project Management Scheduling Techniques: Graduation Project (2004)

The project aiming at solving drawbacks exists in common software in Management market like Primavera and MS Project 2000. It is a project management software, under the supervision of: Prof. Mohamed A. Shouman – Head of OR department – (FCIS–ZU). **Tools:** Oracle9i, Developer 6i, SmartDraw, FrontPage, MS Project2000, Primavera, MS Office.

Graduation Projects Under My Supervision (Full documentation can be found in FCI_ZU library):

- **MindMate (2023)**, Mental health problems mini advisor.
- **Telemedicine (2023)**, connects patients and doctors.
- **Disability Assistant App (2023)**, a mobile based application connects patients with needs with their doctor and care givers.
- * Cure Cycle (2021), partially sponsored by the Ministry of Higher Education and Zagazig University, Egypt.
- * Smart Endoscope System (2021), paper accepted for oral presentation in [IUGRC-5](#).
- * CMMI Pre-Appraisal for ZU-CITC MIS unit (2017)
- * Drop of Life: Cloud-based blood banks and blood donation mobile app (2017)
- * Smart House: IoT based automation (2017)
- * Entitlement and Balancing Management System: an ADF system (2016)
- * Prescription: A cloud-based app to find the nearest pharmacy selling a medicine [Shortlisted in Dell-EMC envision the future GP Competition] (2016)
- * Hotel and Travel Management System (2016)
- * BPMN Modeller (2016)
- * E-commerce online system for El-Sewedy Cables Company, 10th of Ramadan City Sector (2007)
- * [Egyptian Software Engineers Association Website](#) (2006)

MISC

- **NASA Space Apps Cairo**, Judge. (2019, 2020, 2021).
- **“How to be an Effective Researcher” workshop**, Student Development, University of Leicester, Leicester, UK. (5-6/5/2010)
- **YouThink “Dragon Den” Enterprise Training**, Leicester University. (5-6/3/2010)
- **Supervisor for the (Ebda2/ Start) students' community** in the Faculty of Computes and Information, Zagazig University (FCI-ZU). (2008-2009). "Ebda2" has given the best students' community in the faculty for that year.
- Activated the **IEEE Student Branch** in Zagazig University. (Started in April 2009).
- **Supervisor of (Resala/Message) students' community** in the Faculty of Computers and Information, Zagazig University (2007-2008). "Resala" has given the best students' community in the faculty for that year.
- **FCIS First Graduation Projects Competition Coordinator**, Egyptian Software Engineers Association (ESEA), Job Fair 2007, City Stars, Cairo, Egypt (22nd and 30th July 2007)
- **Organizing Committee Member for Zagazig Affairs** in the 37th International Conference on Computers and Industrial Engineering, Alexandria, (October 20-23, 2007).
- **Organizer in the First Java Developers Conference (JDC)** for Java in the Middle East, Jan. 2007, City Stars, Cairo, Egypt. Sun Microsystems™ Jointly with ESEA and EGYJUG. (Jan. 2007)
- **Organizer in the First International Conference (Scientifically Fighting the Terrorism)** 2005, held in Al-Ahram Journalism Corporation, jointly with Faculty of Computes and Information and Faculty of Law – Zagazig University. (Feb. 2005)
- **Founder and Board Member of Egyptian Software Engineers Association (ESEA)**, the first union for FCISs' graduates and students in Egypt. (Oct. 2004-present), <http://www.esea-online.org/>
- **Media Committee Leader** in ESEA. (Oct. 2004 – May 2007)
- **Cultural Committee Leader** – FCI - ZU (2003/2004).
- **Cultural Committee Leader Assistant** – FCI - ZU (2002/2003).

- **Member in Faculty Students Union** for the Cultural Committee – FCI - ZU (2000-2002).

Awards

Nominated for the University of Leicester Student Award (Jan. - Mar. 2013).

I took part in one of the amazing extracurricular courses during my PhD study in the University of Leicester. It was (Leicester Award for Online Networking and Employability Experience). After which I have been nominated for the Award and attended the ceremony in June 2013.

The Student of The Year Award (2002)

In the Faculty of Computers and Informatics (FCI-ZU), this award is given every year to one of the students who shows dedication in their study as well as the social activities during the term times. I'm proud of this one!

Courses

I have taught the following **undergraduate courses** for students in FCI-ZU:

- Systems Analysis and Design
- Introduction to Cloud Computing
- E-business Technologies
- E-Business Strategies
- Multimedia Databases and Digital Libraries
- Fundamentals of Information Systems
- Fundamentals of Medical Informatics

and the following are **postgraduate courses**:

- Formal Information Systems
- Systems Thinking
- Management and Implementation of GIS
- Advanced Systems Analysis and Design
- Business Process Design and Implementation
- Technologies for B2B e-commerce
- Decision Technologies for E-Business
- Research Seminar I
- Selected Topics II

