



جامعة العلوم والتقنية في الفجيرة  
University of Science and Technology of Fujairah

## CURRICULUM VITAE

### PERSONAL INFORMATION

Name:	Yomna Omran Shaker
Nationality:	Egyptian
Job Title:	Assistant Professor
Marital Status:	Married
College:	Engineering and Information Technology
Department:	Electrical Engineering
Date of Birth:	7-10-1976
Moile Number:	0552258609
E-mail:	y.shaker@ustf.ac.ae

### EDUCATIONAL BACKGROUND

#### 1. Doctorate

University:	Cairo University
Country:	Egypt
Date of Obtaining degree:	2010
Major:	Electrical power and machines
Minor:	Utilization of Electric Power
Title:	Analysis of Thermal behavior of cast Resin Dry Type Transformers using Finite Elements Technique

#### 2. Master

University:	Cairo University
Country:	Egypt
Date of Obtaining degree:	2003
Major:	Electrical power and machines
Minor:	Utilization of Electric Power
Title:	Thermal Behavior of SF6 Gas Insulated Transmission Lines

#### 3. Bachelor

University:	Cairo University
Country:	Egypt
Date of Obtaining degree:	1998

### COMPUTER SKILLS

MS Word	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Excel	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Power Point	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Outlook	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Internet	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced

### LANGUAGE SKILLS

Arabic	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
English	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Other, specify	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Advanced

**PROFESSIONAL EXPERIENCE**

From (year)	To (year)	Position	Employer	Country
2021	Present	Assistant Prof.	University of science and Technology of Fujirah)	Fujirah/ UAE
2017	2021	Assistant Prof.	Al Dar University	Dubai/ UAE
2016	2017	Assistant Prof. (visiting professor)	AlGhurair University	Dubai/ UAE
2012	2015	Research Associate.	American University of Sharjah	Sharjah/UAE
2013	2015	Assistant Prof. (adjunct position)	University of Sharjah	Sharjah/UAE

**EDUCATIONAL EXPERIENCE**

Academic Year	Course Title	Academic Year	Course Title
2020	Renewable energy	2020-2019	Electric machines
2020	Smart grid	2020	Power electronics
2020	Energy conversion and storage	2019	Computer control and instrumentation
2019 2017 2015	Electric Circuit I	2017/2018	Electronics I
2017 2015 2014	Electric circuit II	2017/2018	Electronics II
2016	High Voltage	2017/2018	Physics I
2016	Electric machines	2017/2018	Physics II
2016	Electromagnetic fields	2017/2018	Differential Equations
2016	Generation of electric power	2017/2018	Linear Algebra

**PUBLICATIONS****1. Journal Articles**

- 2022 Dalia Yousri , Ehab F. El-Saadany , Yomna Shaker , Thanikanti Sudhakar Babu , Ahmed F. Zobia, Dalia Allam ,”Mitigating mismatch power loss of series–parallel and total-cross-tied array configurations using novel enhanced heterogeneous hunger games search optimizer”, Energy Report, November 2022.
- 2022 Dalia Yousri , Mohammed Mudhsh , Yomna O. Shaker, Laith Abualigah , ElsayedTag-Eldin, Mohamed Abd Elaziz , and Dalia Allam,”Modified Interactive Algorithm Based on Runge Kutta Optimizer for Photovoltaic Modeling: Justification Under Partial Shading and Varied Temperature Conditions”, IEEE access, March 2022.
- 2022 Dalia Yousri , Ahmed Ousama , Yomna shaker , Ahmed Fathy,Thanikanti Sudhakar Babu , Hegazy rezk , Dalia Allam,” Managing the exchange of energy between microgrid elements based on multi-objective enhanced marine predators algorithm”, Alexandria Engineering Journal, Febreury 2022
- 2021 Yomna Shaker, Dalia Yousri , Ahmed Osama , Ahmed Al-Gindy , Elsayed Tag-Eldin , and Dalia Allam “Optimal Charging/Discharging decision of Energy Storage Community in Grid-connected Microgrid Using Multi-objective Hunger Game Search Optimizer” IEEE access September 2021

- 2021 Dalia Yousri, Yomna Shaker , Dalia Allam and Seyedali Mirjalili, "An Efficient Photovoltaic Modeling Using an Adaptive Fractional-order Archimedes Optimization Algorithm: Validation with Partial Shading Conditions", Solar Energy, submitted 2021.
- 2019 Yomna Shaker, "Understanding and localization of partial discharge by numerical analysis of acoustic emission". Asian Journal of Scientific Research. April 2019.
- 2019 Y. O. Shaker, "Detection of Partial Discharge acoustic emission in power transformer", International Journal of electrical and computer engineering (IJECE), December 2019
- 2014 Y. O. Shaker, A. EL\_Hag, and S. h. Jayram, "Thermal Modeling of MV Cable Termination under Square Pulse", IEEE Transactions on Dielectrics and Electrical Insulation, June 2014.
- 2010 Magdy B. Eteiba, Essam A. Alzahab, and Yomna O. Shaker, "Steady State Temperature Distribution of Cast-resin Dry Type Transformer Based on New Thermal Model Using Finite Element Method" , International Journal of Electrical and Computer Engineering, World Academy of Science, Engineering and Technology, Vol.4, no.2, 2010.

#### 4. Conferences

- 2019 Yomna Shaker, " Modeling of Pulsed Electric Field for liquid food processing using simulation method", International Conference On Digitization, Landscaping & Artificial Intelligence , UAE, Nov.2019
- 2018 Yomna Shaker, "Propagation Behavior of Partial Discharge Acoustic Signals by Using Finite Element Technique", 1st International Conference on Computer Application and Information Security, Riyadh, Saudi Arabia, 2018.
- 2016 Yomna Shaker, Abdelmonaem Zahed and Ayman El-Hag, " Experience with Acoustic Sensors in Partial Discharge Detection", IEEE conference on High Voltage Engineering and applications, Chengdu, China, 2016.
- 2012 Y.O.Shaker, A. Elhag, and S.H.Jayram, "Thermal Model of MV Cables Termination using Finite Element Technique", Conference on Electrical Insulation and Dielectric Phenomena, Montreal, Canada, 2012.
- 2011 Yomna O. Shaker, "Sensitivity Study of Transient Temperatures of Cast-resin Dry Type Transformer", 2nd International Conference on Electric Power and Energy Conversion Systems EPECS'11, Sharjah, UAE, September 2011

## PROFESSIONAL AND ACADEMIC ACTIVITIES

### 1. Professional Training

- Research projects
- Project Type: "Qatar Foundation"
- Project Title: " Asset Management for Power Transformers in Smart Grid"
- Principal Investigator: Prof. Ayman El-Hag
- Co-PI: Dr. Yomna Shaker
- Enhancement of transformer PD online monitoring techniques because PD monitoring is a very common online testing technique that has been used extensively in the context of power transformers. Several types of sensors have been utilized like RF antenna, acoustic sensors and high frequency current transformer. Each technique has its own advantages and disadvantages that limit the usefulness of each. This research work will study the possibility to fuse different types of PD sensors and integrate them to improve PD detectability. The significance of this project is foreseen as a result of its contribution in advancing state-of-the-art smart grid technologies. The proposed research employs a number of novel ideas and combines a set of technologies to produce a reliable power transformer on-line monitoring system that is unique and very helpful in electric power network.
- Academic programs accreditation for Arab university (Arab universities association)
- Acting as E- learning coordinator for Engineering School to organize all online material in the pandemic period and enhancing the quality of delivered contents through LMS by conducting workshops and training session. Ensuring the level of quality by making surveys on the Faculty and students' level.

- Developing several quality indicators for E-learning based on system and service quality, content quality, learner perspective and instructor attitude.
- Contributing in institutional effectiveness committee (IE) to maintain the quality assurance on the institutional level and program level by auditing and revise the level of course files, course assessment report and measuring the quality based on the benchmarks referred to MOE.
- Responsible of research activity in the Engineering school as a research representative by organizing research groups , joined research plans , applying for funded projects and participating in IEEE student day and the research day of the university.
- Conducting presentations in academic responsibilities like advising and curriculum development.
- Participating in the preparation of all required documents for applying on CAA accreditation and ABET accreditation for engineering programs and concentrations.
- Participating in community service activity like school visits, organizing works shops and conducting research related to Covid 19 effect on E-learning and assessment quality.

## **2. Workshops**

- Scientific research ethics
- Funding academic project
- Participating in designing the curricula and defining course syllabi for the electrical Engineering Department.

## **3. Master Theses Supervision**

None

## **4. Doctorate Theses Supervision**

None

## **MEMBERSHIP OF PERIODICALS AND SCIENTIFIC JOURNALS**

- IEEE member
- Egyptian Engineers Syndicate

## **AWARDS**

- The best teaching staff from Electrical Engineering Department,
- IEEE student day
- Certified as Academic Program Assessor from Arab Universities Association