Mostafa Hassan Mostafa Abdel-Gawad
Mahmoud Abdelhafuz Tayea street, Awseem, Giza, Egypt
TEL: (+2) 01093984273- 01114741378
E_MAIL: M.H.Mostafa2050@gmail.com

Summary of Qualifications:
● Solid knowledge of mathematical models to find the optimal energy management of a microgrid.
● Hands-on experience in optimization model formulation, validation, and implementation using optimization methods such as the symbiotic organism, firefly, cuckoo, and krill herd search algorithms.
● Deep understanding of electric power system modeling, operation, and electricity market, including expertise in analysis tools, such as MATPOWER and PSIM.
● Advanced experience in probability theory, stochastic processes, and queueing theory.
● Strong proficiency in MATLAB
● Advanced technical writing skills reinforced by writing papers published in top-tier journals

Personal Information:
Date of birth: 1 \ 12 \ 1989
Address: Mahmoud Abdelhafuz Tayea Street, Awseem, Giza, Egypt
Marital Status: Married
Military Status: Exemption

Education:
Ph.D.
- ● Ain Shams University, Faculty of Engineering, Egypt
- ● Ph.D. Electrical Power & Machines (2017-2020)
- ● Thesis: Optimal Allocation of Energy Storage System for Improving Performance of Microgrid
- ● Advisor: Prof. Almoataz Abdelaziz
        As. Prof. Shady Abdel Aleem
        Dr. Samia Alharary

M.Sc.
- ● Cairo University, Faculty of Engineering, Egypt
- ● M.Sc. Electrical Power & Machines (2013-2016)
- ● Thesis: Voltage Stability and Power Flow Studies of Distribution System Including Distributed Generation
- ● Advisor: Prof. Magady El_Marsafawy
        As. Prof. Mostafa El_Shahed

B.Sc.
- ● Cairo University, Faculty of Engineering, Egypt
- ● B.SC Electrical Power & Machine (2008-2012)
- ● General Grades: Very Good With Honors (81.51%)
- ● Graduation Project: Humidity & Temperature Control
- ● Project degree: Excellent

Work Experience:

● Work as teaching assistant at Al-Ameeria Integrated Technical Education Cluster from February 2013 up to October 2013.

● Work as teaching assistant at International Academy for Engineering & Media Science from October 2013 up to October 2020.

● Work as lecturer at Al-Ameeria Integrated Technical Education Cluster from February 2021 up to June 2022 (Part Time)

● Work as lecturer at Science Valley Academy from October 2021 up to June 2022 (Part Time)

● Work as lecturer at International Academy for Engineering & Media Science from October 2020 up to now (Full Time).

Teaching Courses In:

- Power Electronics	- Automatic Control	- Power System
- Electrical Installation	- Energy Conversion	- Protection
- Electrical Machines	- Electrical Circuits	- Graduation Project
- Research Project	- Industrial Systems	- Electrical Systems

Selected Publications

[1] M. H. Mostafa, S. H. E. Abdel Aleem, S. G. Ali, Z. M. Ali, and A. Y. Abdelaziz, "Techno-economic assessment of energy storage systems using annualized life cycle cost of storage (LCCOS) and levelized cost of energy (LCOE) metrics," J. Energy Storage, vol. 29, no. March, p. 101345, Jun. 2020.

[2] M. H. Mostafa, S. H. E. A. Aleem, S. G. Ali, A. Y. Abdelaziz, P. F. Ribeiro, and Z. M. Ali, "Robust Energy Management and Economic Analysis of Microgrids Considering Different Battery Characteristics," IEEE Access, vol. 8, pp. 54751–54775, 2020.

[3] M. Rawa, A. Abusorrah, Y. Al-Turki, S. Mekhilef, M.H. Mostafa, Z.M. Ali, S.H.E.A. Aleem, "Optimal Allocation and Economic Analysis of Battery Energy Storage Systems: Self-Consumption Rate and Hosting Capacity Enhancement for Microgrids with High Renewable Penetration," *Sustainability*, vol. 12, no. 23, p. 10144, Dec. 2020.

[4] M. H. Mostafa, S. H. E. Abdel Aleem, S. G. Ali, and A. Y. Abdelaziz, "Energy-management solutions for microgrids," in Distributed Energy Resources in Microgrids, Elsevier, 2019, pp. 483–515.

Languages:

● Arabic (Mother tongue)

● English Excellent (Writing, Speaking and Reading)

Skills:

● Good user AutoCAD and Dialux

● Proficient in Matlab

● Good user of PSAT, Proteus, and Minitab

● Good user of general algebraic modeling system (GAMS)

● Good user of optimization methods such as the symbiotic organism, firefly, cuckoo, and krill herd search algorithms.

REFERENCES

● Prof. Almoataz Yousef Abdelaziz

Electrical Power and Machines , Ain Shams University

Email: almoataz.abdelaziz@fue.edu.eg

● As. Prof. Shady H. E. Abdel Aleem

Mathematical, Physical and Engineering Sciences, Science Valley Academy

Email: engyshady@ieee.org, shossam@theiet.org