

1. Name: Bahaa Saad Mahmoud, Assistant Professor, Department of Electrical Power and Machines Engineering, Higher Institute of Engineering, Elshorouk Academy.

2. Degrees:

B.S. (Electrical Power and Machines Engineering) Higher Institute of Engineering, Elshorouk Academy, Elshorouk City, Cairo, Egypt. **2009**

M.S. (Electrical Power and Machines Engineering) Cairo University, Cairo, Egypt. **2016**

Ph.D. (Electrical Power and Machines Engineering) Cairo University, Cairo, Egypt. **2020**

3. Years of Service on Faculty: 14

- 07/2020 - present Assistant Professor.

4. Other Experience:

- Freelancer software developer.

5. Consulting Activities (selected)

- Design and Co-supervising electrical distribution system projects.

6. States in which registered:

- Ismailia, Egypt.

7. Principal publications of last 5 years (selected):

[1] A.A. Kandel, H. Kanaan, T. Mahmoud, Bahaa Saad, "Efficient reduction of power losses by allocating various DG types using the ZOA algorithm", Results in Engineering, vol. 23, p.102560, 2024, doi.org/10.1016/j.rineng.2024.102560.

[2] El-Dabah, M.A., El-Sehiemy, R.A., Hasanien, H.M., Saad, B, "Photovoltaic model parameters identification using an innovative optimization algorithm", IET Renew. Power Gener. 00, 1– 14 (2023). <https://doi.org/10.1049/rpg2.12712>.

[3] M. A. El-Dabah, R. A. El-Sehiemy, H. M. Hasanien, and B. Saad, "Photovoltaic model parameters identification using Northern Goshawk Optimization algorithm", Energy, vol. 262, p. 125522, 2023, doi: <https://doi.org/10.1016/j.energy.2022.125522>.

[4] Ali, Z.M.; Aleem, S.H.E.A.; Omar, A.I.; Mahmoud, B.S. "Economical-Environmental-Technical Operation of Power Networks with High Penetration of Renewable Energy Systems Using Multi-Objective Coronavirus Herd Immunity Algorithm", Mathematics 2022, 10, 1201. <https://doi.org/10.3390/math10071201>.

[5] Ahmed R. Abul'Wafa, Bahaa S. Mahmoud, Aboul'Fotouh A. Mohamed, "Analytical Method for Directional over Current Relays Coordination in Micro Grids", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878 (Online), Volume-8 Issue-2, July 2019.

[6] A.R. Abul'Wafa, B.S. Mahmoud, "Integrated Algorithms for Directional Overcurrent Relays Coordination in Interconnected Systems", Www.Ijetae.Com, ISSN 2250 – 2459, Volume 8, Issue 5, May 2018

8. Scientific and professional societies of which a member

- Egyptian Engineers Syndicate.

9. Honors and awards:

- None

10. Institutional & professional service in last 5 years:

- Internal Evaluator, Electrical Power and Machines Engineering Department, Higher Institute of Engineering, Elshorouk Academy (2015 - present).
- Member in Internal Evaluation Committee, Higher Institute of Engineering, Elshorouk Academy (2020 - present).

11. Professional Development Activities in the last 5 years:

- Participating in numerous trainings in the areas of administrative skills (credit hour system, leadership skills) and education quality (specification of programs and courses, evaluation of learning outcomes for colleges and institutes of higher education, self-evaluation of colleges and institutes of higher education, and preparation of course specifications) at the Developing the Capabilities of Faculty Members and Leaders Center, Cairo University, Giza, Egypt (2021 – 2022).