1. Name: Basem Abd-Elhamed Rashad, 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.
- M.S. (Electrical and Control Engineering) Arab Academy for Science and Technology and Maritime Transport (AASTMT), Cairo, Egypt.
- Ph.D. (Electrical Power and Machines Engineering) <u>Digital protection</u>, Cairo University, Cairo, Egypt.

3. Years of Service on Faculty: 17

• 06/2020 - present Assistant Professor.

4. Other Experience:

5. Consulting Activities (selected)

- Design and supervision of distribution system and light current systems at IBRA Park, Ibra, Oman (2022-2023).
- Design and Co-supervising electrical distribution system, and electrical Protection system projects.

6. States in which registered:

• Cairo, Egypt.

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

- Abdelfattah, W., Abdelhamid, A. S., Hasanien, H. M., & Basem Abd-Elhamed Rashad. (2024).
 "Smart vehicle-to-grid integration strategy for enhancing distribution system performance and electric vehicle profitability,". Energy, 131807. https://doi.org/10.1016/j.energy.2024.131807
- Basem Abd-Elhamed Rashad, Ibrahim, D. K., Gilany, M. I., Abdelhamid, A. S., & Abdelfattah, W. (2024), "Identification of broken conductor faults in interconnected transmission systems based on discrete wavelet transform,". Plos one, 19(1), e0296773. https://doi.org/10.1371/journal.pone.0296773
- Basem Abd-Elhamed Rashad, Ibrahim, D. K., & Gilany, M. I. (2020), "Adaptive single-end transient-based scheme for detection and location of open conductor faults in HV transmission lines,". *Electric Power Systems Research*, 182, 106252. https://doi.org/10.1016/j.epsr.2020.106252
- Basem Abd-Elhamed Rashad, Ibrahim, D. K., & Gilany, M. I. (2020), "Single-End Measuring Scheme for Open Conductor Fault Detection Based on Discrete Wavelet Transform in HV Transmission Lines,". International Journal of Engineering and Information Systems (IJEAIS), 4, 8,2020.
- Abdelaziz, Y., El-Helw, M., & Basem Abd-Elhamed Rashad. (2014), "Comparative Study of Three Maximum Power Point Tracking Algorithms for Grid Connected PV Array,". ELECTRIMACS 2014, 19th -22nd May 2014, Valencia, Spain.
- Abdelaziz, Y., El-Helw, M., & Basem Abd-Elhamed Rashad. (2013), "Transient analysis of grid-connected photovoltaic system based on comparative study of Maximum Power Point Tracking Techniques,". International Journal of Advances in Power Systems (IJAPS), 1(3).

8. Scientific and professional societies of which a member

• Egyptian Engineers Syndicate, and Egyptian Society of Engineers.

9. Honors and awards:

None

10. Institutional & professional service in last 5 years:

• Member of the Internal Quality Assessment Committee, the Electrical Power and Machines Engineering Department, Higher Institute of Engineering, Elshorouk Academy (2020 - Present).

11. Professional Development Activities in the last 5 years:

- Attending many meetings, events, and conferences related to the field of Electrical power and machines at the MEPCON (2020 present).
- Attending many trainings in the field of education quality (Specification of programs and courses and evaluation of learning outcomes for colleges and institutes of higher education Self-evaluation of colleges and institutes of higher education Preparing Course Specifications) at the National Authority for Quality Assurance and Accreditation of Education (NAQAA), Cairo, Egypt (2022 2023) and the administrative field (Leadership skills, and Credit Hours System) at Developing the Capabilities of Faculty Members and Leaders Center, Cairo University, Giza, Egypt (2021 2022).