Ashraf Said Hussein Al-Bardawil, B.Sc.,

Lecturer

Summary

Dr. Ashraf AL- Bardawil completed his undergraduate and M.Sc. at the department of Electric and Control Engineering at AASTMT. In 2024, he obtained his Ph.D. in Physics and Engineering Mathematics from the Faculty of Engineering at Helwan University. Since 2012, he has served as a faculty member in the Basic and Applied Science department at the College of Engineering and Technology at AASTMT.

Professional Experience

2012 – 2016	Graduate teaching assistant at the college of engineering, Basic and Applied Science Department, AASTMT.
2016 – 2024	Teaching assistant, Basic and Applied Science Department, AASTMT.
2024 – present	Lecturer, Basic and Applied Science Department, AASTMT.

Education

- **2006 – 2011** B.Sc. in Electric and Control Engineering, Arab Academy for Science, Technology & Maritime Transport, Cairo, Egypt.
- **2012 – 2016** M.Sc. Electric and Control Engineering, Arab Academy for Science, Technology & Maritime Transport, Cairo, Egypt. [Excellent with Honors Degree**]**
- **2019 – 2024** PhD. Engineering Physics College of Engineering, Helwan University, Cairo, Egypt.

Publications, Technical Reports & Presentations

1. Ashraf EL- Bardawil, Mona Fouad Moussa, Yasser Gaber Dessouky, Samir Yousef Marzouk , " Power Management of Open Winding PM Synchronous Generator for Unbalanced Voltage Condition", XIX-th International Symposium on Electrical Apparatus and Technologies SIELA, Bourgas, Bulgaria, 2016, doi: https://doi.org/10.6113/jpe.2016.16.6.2192.

2. Ashraf Al Bardawil, Nehad A. Zidan, Noha H. El-Amary, W. Abbas, Mostafa Fedawy, "Perovskite Silicon Solar Cell Emulation Using Multi-Layer Perceptron Deep Neural Network," Journal of Advanced Research in Applied Sciences and Engineering Technology, Vol. 48, no. 1, pp 51-60, July 2024, doi: https://doi.org/10.37934/araset.48.1.5160.

3. Ashraf Al Bardawil, Nehad A. Zidan, Noha H. El-Amary, W. Abbas, Mostafa Fedawy, "Intelligent Maximization of Eco-friendly Output Energy Based on internal Photovoltaic Structure," International Journal of Renewable Energy Research - IJRER, Vol. 13, no. 4, pp. 1497-1507, December 2023, doi: https://doi.org/10.20508/ijrer.v13i4.14174.g8823.

4. O. M. Mohyeldien, N. H. El-Amary, and A. Al Bardawil, "Sustainable design of organic solar cells utilized machine and deep learning," Scientific Reports, vol. 16, no. 1, Jan. 2026, doi: https://doi.org/10.1038/s41598-026-35067-7.

5. A. Al Bardawil, O. M. Mohyeldien, and N. H. El-Amary, "Organic and Inorganic Solar Cells: Thermal Stability Mechanisms, Efficiency and Environmental Implications," Menoufia Journal of Electronic Engineering Research, vol. 35, no. 1, pp. 156–162, Jan. 2026, doi: https://doi.org/10.21608/mjeer.2025.420304.1195.