



Faculty Profile

Full Name: Engr. Dr. Aftab Ahmed Almani
Position/ Designation: Assistant Professor
Faculty/Department: Electrical Engineering
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Short Introduction

Dr. Aftab Ahmed Almani has a Ph.D. in Electrical Engineering from Shandong University, Jinan China and Master of Engineering (ME) degree in Electrical Engineering from Mehran University of Engineering and Technology, Jamshoro Sindh, Pakistan. He obtained his B.E from Quaid-e-Awam University of Engineering, Science and Technology, Nawab Shah Sindh, Pakistan. He has published numerous articles in high-quality international journals. He has several years' experience in industrial as well as academic field.

His research interest is in smart grid, voltage and frequency control of a microgrid in an islanded mode, Load management, wind power forecasting, Integration of Renewable energy sources with utility grids, Single level and multilevel inverters.



Experience

- Feb, 2024-Onwards: Assistant Professor in Nazeer Hussain University, Karachi.
- July,202-Feb,2024: Sr. Electrical Engineer/Plant manager in Hydrochina International Engineering Co. Ltd.
- August,2012-Sept,2017: Lecturer in The Islamia University of Bahawalpur, Punjab.
- Oct,2011-May,2012: Sr. Electrical Engineer in Eypatian Pakistan Telecommunication Service Company (Pvt) Ltd.
- Jan,2007-Oct, 2011; Electrical Engineer in Mobiserve Pakistan (Pvt) Ltd.

Educational Information

- ❖ 2023 Ph.D. (Electrical Engineering) from Shandong University, Jinan China.
- ❖ 2017 M.E (Electrical Engineering) from Mehran University of Engineering & Technology, Jamshoro Sindh, Pakistan.
- ❖ 2006 B.E (Electrical Engineering) from Quaid-e-Awam University of Engineering, Science & Technology, Nawab Shah Sindh, Pakistan.



Achievements, Research/Publications

❖ RESEARCH PUBLICATIONS (JOURNAL)

1. **Aftab Ahmed Almani**; Han, X.; Umer, F.; ul Hassan, R.; Nawaz, A.; Shah, A.A.; Mustafa, E. Optimal Solution for Frequency and Voltage Control of an Islanded Microgrid Using Square Root Gray Wolf Optimization. *Electronics* **2022**, *11*, 3644. <https://doi.org/10.3390/electronics11223644> (IF=2.69)
2. **Aftab Ahmed Almani**.; Han, X. Real-Time Pricing-Enabled Demand Response Using Long Short-Time Memory Deep Learning. *Energies* **2023**, *16*, 2410. <https://doi.org/10.3390/en16052410> (IF=3.252)
3. Shah, A. A., **Aftab, A. A.**, Han, X., Baloch, M. H., Honnurvali, M. S., & Chauhdary, S. T. (2023). Prediction Error-Based Power Forecasting of Wind Energy System Using Hybrid WT–ROPSO–NARMAX Model. *Energies*, *16*(7), 3295. (IF=3.252)
4. Aamer Abbas Shah, X. Han, H. Armghan, and **A. A. Almani**, “A Nonlinear Integral Backstepping Controller to Regulate the Voltage and Frequency of an Islanded Microgrid Inverter,” *Electron.* 2021, Vol. 10, Page 660, vol. 10, no. 6, p. 660, Mar. 2021.(IF=2.4)
5. Aamer Abbas Shah, X. Han, ,and **A. A. Almani** “Prediction Error based power forecasting of wind energy system using Hybrid WT-ROPSO-NARMAX model. ,” submitted to Electrical Engineering journal . (IF=1.8)
6. Khattak, M. I., Saleem, N., Nawaz, **A., Ahmed Almani**, A., Umer, F., & Verdú, E. (2022). ERBM-SE: Extended Restricted Boltzmann Machine for Multi-Objective Single-Channel Speech Enhancement. (IF=4.936)
7. Umer, F., Sabir, S. U., Khan, N., Mughal, M. A., Gauhar, H., **Almani, A. A.**, & Shah, G. F. (2014). De-Coupled Power System Analysis Using Parameter Injection Method

❖ RESEARCH PUBLICATIONS (CONFERENCE)

1. W. Aslam, Y. XU, A. Siddique, A. Rehman, A. Azhar and **A. A. Almani**, "Numerical Examination of 132/11 KV Sub Station through SVC FACTS device for Voltage Enhancement," 2019 2nd International Conference on Computing, Mathematics and Engineering Technologies (iCoMET), Sukkur, Pakistan, 2019, pp. 1-7, doi: 10.1109/ICOMET.2019.8673527.
2. Mughal, M., Khan, M., Shah, A., & **Almani, A. A.** (2018, January). Parameter estimation of DC motor using chaotic initialized particle swarm optimization. In Proc. 3rd Int. Conf. on Electromechanical Control Technology and Transportation, Chongqing, China (pp. 19-21)

❖ SEMINAR/WORKSHOPS

- Workshop on “Electric Shock: Biological Effect & Management of Shock Victim” on 25th September 2012
- Seminar on “IEEE Pakistan Student, Gold & WIE Congress 2013” by MUET, Jamshoro,



Sindh, Pakistan on 23-25 October 2013.

- Workshop and orientation Course on “Community Basic Life Support & Life Safety” conducted by Punjab Emergency Service (Rescue 1122) on 21-23 May 2014.
- Seminar on “Promoting IEEE activities in IEEE UCET IUB Student Branch” by IEEE UCET-IUB (2013-14).
- Workshop on “CPD Framework for Professional Development of Engineers” on 17th March 2014.
- Conference on “International Youth Maker and Intelligent Robot” by Shandong University, China on 5th August 2018.