



Fahad Alshammari, Ph.D

Assistant professor at Jazan University

- Date of Birth:** Oct. 11, 1984
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Interests

- Smartgrid Application
- Microgrid Control and operation
- Cooperative Control
- Application of AI in Power System
- Electrical Machine Design

Skills

Programming:

- MATLAB
- Python
- C, C++

PS Simulation software:

- EMTP
- PS CAD
- DIgSILENT
- etap

Optimization Tools:

- CVX/CVXGEN
- YALMIP

About me

Well educated engineer interested in education, project management as well as training and development. I had been involved in many projects, conferences and seminars during my journey in power and education sectors. My qualities help me to promote my career development in different aspects. Those qualities include perseverance, honesty, planning, and flexibility. My objective for following years to apply what I have learned in academia to solve real life issues in industry.

Education

Postgraduate Studies

- 2017 – 2022** **Ph.D. in Electrical Power Engineering** **Marquette Univ., USA**
Title: A Study on the Hierarchical Control Structure of the Islanded Microgrid.
Supervisors: Prof. Ayman EL-Refaie
Grade: CGPA: 3.9
- 2013 – 2015** **M.Sc. in Electrical Power Engineering** **UTM, Malaysia**
Title: Fuzzy Sliding Mode Controller for Cascaded Multilevel Inverter.
Supervisors: Dr. Shahrin Md Ayob
Grade: CGPA: 3.7

Undergraduate Study

- 2009 – 2013** **B.Sc in Electrical Engineering (Honours)** **Multimedia Univ., Malaysia**
Project Title: Design & Analysis of a Solar and Wind Energy System
Supervisors: Dr. Naeem Mohamed Hannon
Grade: CGPA: 3.2

Working Experience

- October 2024 – Current** **Assistant Professor** **Jazan University, KSA**
My role involves mentoring students, developing and delivering courses, conducting research, and contributing to the academic and administrative growth of the department and university
- January 2024 – October 2024** **Chairman of Civil Engineering Department** **Onaizah Private Colleges, KSA**
Supervision of educational and administrative affairs, quality, field training, and graduates in the department.
- August 2023 – January 2024** **Adjunct Assistant Professor** **UHB, KSA**
Teaching Electronics I, Signals and Systems, Digital Logic Design and Electric circuit 1.
- April 2015 – Feb. 2017** **Project Engineer** **Tecmo Arabia, KSA**
In charge of planning and coordinating technical engineering initiatives to ensure completion of off-grid power plant maintenance projects within their budget and according to a schedule.
- April 2007 – Oct. 2009** **Electronic Specialist** **Halliburton, KSA**
Provide preventive and corrective maintenance for oil field measurement tools and other oil service logistics.
- June 2006 – April 2007** **Electronic Specialist** **Christensen Saudi Arabia (Baker Hughes), KSA**
Provide preventive and corrective maintenance for special tools which take measurements while drilling the oilfield.

Soft Skills

Self-Motivation	● ● ● ● ●
Teamwork	● ● ● ● ●
Resilience	● ● ● ● ●
Problem solving	● ● ● ● ●
Leadership	● ● ● ● ●
Communication skills	● ● ● ● ●
Critical Thinking	● ● ● ● ●

Profiles



Training

12, May 23 – 15, May. 23	Academic Quality Practitioner ETEC, KSA This training course enables the acquisition of essential knowledge, skills, and attitudes in quality practices within the academic sector.
April 21 – October 22	Engineering Professional Development Course Marquette University, USA Provide preventive and corrective maintenance for oil field measurement tools and other oil service logistics.
27, October 19 – 29, October 19	Fundamentals of Distributed Energy Resources UWM-Madison, USA Learn about Distributed Energy Resources including traditional and renewable energy sources, energy storage, impact of electric vehicles to power grid, microgrids.

Review Duties

Journals	IEEE transactions on Transportation Electrification
Conferences	IEEE-ECCE 2021, IEEE-ECCE 2022, IEEE-ISGT NA 2021.

Publications

Journals

- Abdilahi, A.M., Yatim, A.H., Mustafa, M.W., Khalaf, O.T., Shumran, A.F., & Nor, F.M. (2014). Feasibility study of renewable energy-based microgrid system in Somaliland's urban centers. Renewable & Sustainable Energy Reviews, 40, 1048-1059.
- F. Alshammari, A. El-refaie, S. Alyahya, and S. Khan, "Optimization-Based Distributed Controller for Multi-Agents System in Microgrid Secondary Control," IEEE Open Access, accepted for publication.

Conferences

- A. Fahad and E. -R. Ayman, "Functions of Microgrid Hierarchal Control Structure," 2019 IEEE 7th International Conference on Smart Energy Grid Engineering (SEGE), 2019.
- F. Alshammari and A. El-Refaie, "Distributed Averaging Optimization-based Technique for Microgrid Secondary Control," 2020 IEEE Energy Conversion Congress and Exposition (ECCE), 2020.
- F. Alshammari and A. El-Refaie, "Time-Varying Optimization-Based Consensus Control For Microgrid's Secondary Control," 2021 IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT), 2021.
- F. Alshammari and A. El-Refaie, "Generalized Droop Control For Mixed Impedance Microgrid," 2021 IEEE PES Innovative Smart Grid Technologies - Asia (ISGT Asia), 2021.(Best paper award)
- F. Alshammari and A. El-Refaie, "Economic Dispatch-Based Secondary Control For Islanded Microgrid," 2022 IEEE PES Innovative Smart Grid Technologies - Asia (ISGT Asia), 2022.

Awards

Best paper award	IEEE-PES ISGT Asia , Brisbane, Australia	2021/2022
Dean's award	University Technology Malaysia, Malaysia.	2014/2015
Dean's award	Multimedia University, Malaysia.	2011/2012
Distinction award	Ministry of Higher Education, SACM in Malaysia	2011/2012
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