Safia Babikir Bashir

ELECTRICAL ENGINEER

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+971-56-6071817
Sharjah, United Arab Emirates

Master graduate Looking for an opportunity to work on an important research work/study in an institution that provides professional development, interesting experiences, and personal growth.

WORK EXPERIENCE

Assistant instructor
Ajman University
09/2021 - Present — *Ajman, United Arab Emirates*
Electrical Engineering Department

Achievements/Tasks
- Responsible for teaching a variety of Laboratory and Tutorial sessions.

Research Assistant
Ajman University
10/2017 - 12/2020 — *Ajman, United Arab Emirates*
Electrical Engineering Department,

Achievements/Tasks
- Conduct literature reviews
- Publish research outcomes in refereed journals and conferences

Trainee
Yokogawa Middle East & Africa B.S.C
05/2017 - 07/2017 — *Abu Dhabi, United Arab Emirates*
Technical Support Division

Research Assistant
Khalifa University- The Petroleum Institute
01/2017 - 03/2017 — *Abu Dhabi, United Arab Emirates*
Power Electronics and Sustainable Energy (PEASE) Research Lab, ADNOC Research and Innovation Center (ADRIC)

Achievements/Tasks
- Conduct literature reviews
- Publish research outcomes in refereed journals and conferences

Graduate Research /Teaching Assistant
Khalifa University- The Petroleum Institute
08/2014 - 12/2016 — *Abu Dhabi, United Arab Emirates.*
Electrical Engineering Department

Trainee
Dubai Police General Headquarters
06/2013 - 09/2013 — *Dubai, United Arab Emirates.*

Achievements/Tasks
- Responsible of checking and repairing CCTV, Tetra, DVRs, and ANPR system in Dubai police patrol cars and motorcycles

EDUCATION

Master of Science in Electrical Engineering
Khalifa University- The Petroleum Institute,
08/2014 - 12/2016 — *Abu Dhabi, UAE*

Thesis:
- Design and Control of Multi Modular Voltage Source Converter for an HVDC Connected to Weak AC System.

SKILLS

Research | Teaching | Self Motivating | Creative Thinking | Leadership | Team Work | Complex problem Solving

TECHNICAL SKILLS

Python | MATLAB | LabVIEW | C | C++ | Pandas | NumPy | Scikit-learn | ETAP | Matplotlib | Seaborn | Arduino microcontroller

PUBLICATIONS

Journal Articles
Power balancing of grid connected PV system based on MMC under different irradiation conditions
Author(s)
Safia Babikir Bashir, Hasan A. Zidan, Zulfiqar Ali Memon
May 2020
International Journal of Electrical Power and Energy Systems/Volume117 /105717

Q1 Journal

Journal Articles
An Improved Voltage Balancing Algorithm for Grid Connected MMC for Medium Voltage Energy Conversion,
Author(s)
Safia Babikir and Abdul R. Beig,
February 2018
International Journal of Electrical Power and Energy Systems (Elsevier)/Volume 95/Pages 550-560

Q1 Journal

Journal Articles
Sensor-less vector control of induction motor at low-speed operation using modular multilevel converter
Author(s)
Hasan Zidan, Safia Babikir
March 2019
Australian Journal of Electrical and Electronics Engineering /Volume 16/Pages 127-135

Journal Articles
A Novel Robust Speed Sensor-Less Control of DC Motor
Author(s)
Hasan Zidan, Safia Babikir
March 2019
International Review of Automatic Control /Volume 12

EDUCATION

Bachelor of Science in Electrical Engineering / Communication
Ajman University (AU)
09/2009 - 09/2013 *Ajman, UAE*

Honor with distinction degree
- GPA (3.97/4)

HONOR AWARDS

Full Graduate scholarship (08/2014 - 12/2016)
Khalifa University
- Master of Science in Electrical Engineering

Fifth place among 157 projects participating in Innovator (03/2014)
Innovator 2014
- Project title (Wind turbine-powered water pump

Best Research Paper Award (Sound Source Localization System) (03/2013)
The Ninth Student Scientific Conference - Ajman University
- Paper title : Sound Source Localization System

First prize in the Engineering Design Project Competition (05/2012)
IEEE Open Day
- Project title (Wind turbine-powered water pump

CERTIFICATES

Qiskit Global Summer School on Quantum Machine Learning 2021 (07/2021 - 08/2021)
Completed the two-week intensive course provided by IBM Quantum, completing all graded lab work assignments with a final cumulative score 100%, demonstrating applied understanding and comfort with and about Quantum Computing and Quantum Machine Learning using Qiskit

Python for Data Science and Machine Learning Bootcamp (01/2021 - 05/2021)
Offered through Udemy

Algorithms for Battery Management Systems Specialization (01/2020 - 05/2020)
An online non-credit course authorized by the University of Colorado offered through Coursera that includes the following courses:

Machine Learning by Stanford University (01/2020 - 03/2020)
Offered through Coursera

Total Professors Associés (TPA) Safety Engineering Course (04/2017 - 04/2017)
The Petroleum Institute, Abu Dhabi, United Arab Emirates

Teledyne LeCroy Training session on the use of Oscilloscopes for power analysis applications (03/2017 - 03/2017)
The Petroleum Institute, Abu Dhabi, United Arab Emirates

INTERESTS

- Machine Learning
- Power System
- Power Electronics
- Control System
- Gaming
- Renewable Energy

PUBLICATIONS

Conference Proceedings
A Modified CPS-PWM for Capacitor Voltage Ripples Reduction of Modular Multilevel Converter Based Variable Speed Drive
Author(s)
Safia Babikir Bashir, Hasan A. Zidan, Zulfiqar Ali Memon
June 2020
IEEE 29th International Symposium on Industrial Electronics (ISIE) Delft, Netherlands

Published in IEEE Xplore

Conference Proceedings
An Improved Voltage Balancing Method for Grid Connected PV System Based on MMC Under Different Irradiance Conditions
Author(s)
Safia Babikir and Zulfiqar Ali Memon,
August 2018
IEEE 61st International Midwest Symposium on Circuits & Systems , Canada

Published in IEEE Xplore

Conference Proceedings
An Improved Voltage Ripple Control Algorithm for Modular Multilevel Converter Based Variable Speed Drive
Author(s)
Safia Babikir ,Hasan Zidan and Stanimir Valtchev,
August 2018
18th International Conference On Power Electronics And Motion Control, Budapest ,Hungary

Published in IEEE Xplore

Conference Proceedings
An improved space vector PWM for grid connected MMC
Author(s)
Safia Babikir, Abdul R. Beig, and Majid Poshta
November 2017
Renewable Energy Research and Applications (ICRERA), San Diego, USA

Published in IEEE Xplore

Conference Proceedings
Novel SVPWM-Based Switching Algorithm for MMC for High Power Applications
Author(s)
Safia Babikir and Abdul R. Beig
October 2016.
IEEE 59th International Midwest Symposium on Circuits and Systems (MWSCAS), Abu Dhabi, UAE,

Published in IEEE Xplore

REFERENCES

Dr. Balanthi Beig- Associate Professor
"Khalifa University "
Contact: balanthi.beig@ku.ac.ae

Dr. Hasan A. Zidan- Associate Professor
"Ajman University"
Contact: h.alhaj@ajman.ac.ae

LANGUAGES

Arabic
English