Dr. MOHAMMAD AIJAZ M. Tech. Ph.D.

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CAREER OBJECTIVE

Ph.D. qualified Electrical & Electronics Engineer with 15+ years of academic and research experience. Proven track record as Associate Professor and Head of Department. Seeking a challenging academic or research role in a reputed university or institution in the Gulf region to contribute to technical education and innovation.

ACADEMIC QUALIFICATIONS

- **Ph.D. in Electrical & Electronics Engineering** Bharath Institute of Higher Education and Research, June 2025
- **Ph.D. in Electrical & Electronics Engineering** OPJS University, Jan 2018
- M.Tech in Power Electronics JNTU Hyderabad, Dec 2013
- **B.Tech in EEE** Kakatiya University, May 2007

PROFESSIONAL EXPERIENCE

Associate Professor & HOD – EEE Dept.

Kodada Institute of Technology & Science for Women | May 2018 - Present

- Leading academic operations, curriculum design, and departmental planning.
- Spearheaded NBA accreditation activities and placement training.
- Mentored over 200 undergraduates and 50+ postgraduates.

Assistant Professor - EEE Dept.

Kodada Institute of Technology & Science for Women | Jun 2013 – May 2018

Lecturer – EEE Dept.

The Vazir Sultan College of Engineering | Jun 2008 - May 2011

ADDITIONAL RESPONSIBILITIES

- **Training & Placement Officer** Jan 2022 Present
- **NBA Committee Member** Jan 2018 Present
- M.Tech Project Coordinator Since 2018

TECHNICAL SKILLS

- Power Electronics & Drives
- High Voltage Engineering
- Electrical Machines & Circuits
- Smart Grids, HVDC & EHVAC Transmission
- MATLAB / Simulink, PSCAD, LabVIEW
- Academic Coordination & Research Supervision

CERTIFICATIONS (NPTEL / SWAYAM)

- Principles of Electrical Sciences 68%
- Internet of Things 61%
- Introduction to Industry 4.0 and Industrial IoT 60%

RESEARCH & PUBLICATIONS

- **Books Published**: Cheque Fraud Detection using NLP, LAP Lambert
- **Patents**: Wavelet-Based Algorithm for Fault Identification in Power Systems (Published, India)
- 12 UGC-Approved Journal Publications
- 18 International Conference Papers Indexed in SCOPUS and Web of Science

KEY INTERNATIONAL PRESENTATIONS

- ANFIS-Based Voltage Source Converter ICCSP 2024, India (SCOPUS)
- Management of Renewable Energy with Fuzzy Controllers ICEES 2023 (Web of Science)
- Optimization in Power Electronics IC3TES 2024 (SCOPUS)

LANGUAGES

- English Fluent
- Hindi Fluent
- Telugu Native

PERSONAL DETAILS

Date of Birth: 29-08-1983

Nationality: Indian

Passport:

Willing to Relocate: Yes **Expected Joining**: 30 Days

PUBLICATIONS (12 UGC Approved)

- **1. Aijaz MD** and Dr. Suchi Jain, (2015), "Study Of Power Electronic Converter And Modeling Of PID Controller: An Analytical Study", International Journal in IT and Engineering, Vol.03 Issue-02, Available at: http://ijmr.net.in/pastijite.php?p=VOLUME%203,ISSUE%202,FEBRUARY,2015
- **2. Aijaz MD** and Dr. Suchi Jain, (2015), "Study Of DC-AC Boost Converter & Its Controlling In Power Electronics", ECONSPEAK: A Journal of Advances in Management IT & Social Sciences, Vol.5, Issue 12, Available at: http://skirec.org/category/econspeak/past/volume-5-issue-12-december-2015-past/
- **3. Aijaz MD** and Dr. Suchi Jain, (2016), "Assessment of DC-DC Vdd-Hopping Converter & Its Controlling In Power Electronics", International Journal of Research in Engineering and Applied Sciences, Vol. 6, Issue 7, Available at: http://euroasiapub.org/category/ijreas/past/volume-6-issue-7-july-2016/page/2/?
- **4.** SRUTHI KOLAPUDI, B. SHIVAJI, **MD. AIJAZ** A NOVEL SMCC BASED SLIDING MODE FOR SOLAR BASED WATER PUMPING SYSTEM The International journal of analytical and experimental modal analysisVolume XIV, Issue V, May/2022 ISSN NO: 0886-9367
- **5.** UOOHA NAGUBANDI, N. MAHESHBABU, **MD. AIJAZ** DESIGN AND IMPLEMENTATION OF SRM BASED PLUG-IN HEV WITH VARIOUS DRIVING AND ONBOARD CHARGING CAPABILITIES The

- International journal of analytical and experimental modal analysis Volume XIV, Issue V, May/2022 ISSN NO: 0886-9367
- **6.** RESHMA SHAIK, J. RAMAKRISHNA, **MD. AIJAZ** FUZZY LOGIC CONTROLLER BASED DVR FED HYBRID SYSTEM TO ENHANCE SAG COMPENSATION CAPABILITY International Journal of Research Volume X, Issue IX, September/2021 ISSN NO:2236-6124
- **7.** MADHURIMA GOLLAPALLI, D. SIVA PRASAD, **MD. AIJAZ** DESIGN AND SIMULATION OF DFIG BASED HYBRID RENEWABLE ENERGY SOURCES International Journal of Research Volume X, Issue IX, September/2021 ISSN NO:2236-6124
- **8.** SHIRISHA VONTEDDU, **MD. AIJAZ** A NOVEL ANN BASED SOLAR FED CASCADED MLI TO ENHANCE POWER QUALITY International Journal of Research Volume X, Issue IX, September/2021 ISSN NO:2236-6124
- **9.** UHA CHINNAM, K. SHIVA KRISHNA, **MD. AIJAZ** DFIG Based Hybrid Power Controlled By Single Input Variable FLC in Stand Alone Mode The International journal of analytical and experimental modal analysis Volume XIV, Issue V, May/2022 ISSN NO: 0886-9367
- 10.SWATHI PULI, E. SANDHYA, MD. AIJAZ DESIGN AND IMPLEMENTATION OF NOVEL INTELLIGENT CONTROLLER FOR WIND-PV-DIESEL BASED STANDALONE MICROGRID The International journal of analytical and experimental modal analysis Volume XIV, Issue V, May/2022 ISSN NO: 0886-9367
- **11.**SNEHA VEMULA, D. SIVA PRASAD, **MD. AIJAZ** Enhancing the unbalanced grid voltage compensation by controlling power and current limiting control of wind turbine The International journal of analytical and experimental modal analysis Volume XIV, Issue V, May/2022 ISSN NO: 0886-9367
- **12.**UMA MUNAGANTI, **MD. AIJAZ**, B. SHIVAJI A NOVEL FLC BASED MICROGRID TO ENHANCE STABILTY WITH VARIOUS GRID IMPEDENCES The International journal of analytical and experimental modal analysis Volume XIV, Issue V, May/2022 ISSN NO: 0886-9367.

CONFERENCES (18 Scopus and Web of Science Indexed)

- 1. M. Aijaz and K. Sakthivel, "ANFIS-based Voltage Source Converter for Energy Management of Grid-Integrated Renewable Energy Sources," 2024 10th International Conference on Communication and Signal Processing (ICCSP), Melmaruvathur, India, 2024, pp. 609-614, doi: 10.1109/ICCSP60870.2024.10544349. (SCOPUS INDEXED)
- 2. M. Aijaz and K. Sakthivel, "Neural Network Based Voltage Source Converter for Power Management of Hybrid Energy System," 2024 Third International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS), Krishnankoil, Virudhunagar district, Tamil Nadu, India, 2024, pp. 1-7, doi: 10.1109/INCOS59338.2024.10527574. (SCOPUS INDEXED)
- **3. M. Aijaz** and K. Sakthivel, "ANFIS based Voltage Source Converter for Energy Management of Hybrid Energy Sources," 2024 3rd International Conference for Innovation in Technology (INOCON), Bangalore, India, 2024, pp. 1-6, **doi: 10.1109/INOCON60754.2024.10511862.** (SCOPUS INDEXED)
- **4. M. Aijaz** and K. Sakthivel, "Management of the integrated Renewable Energy Sources with Fuzzy Logic Controllers based Power Converters," 2023 9th International Conference on Electrical Energy Systems (ICEES), Chennai, India, 2023, pp. 635-640, **doi: 10.1109/ICEES57979.2023.10110069. (WEB OF SCIENCE INDEXED)**
- **5.** T. Muthamizhan, **M. Aijaz**, G. Prakash, P. Rathnavel and A. Sivakumar, "A Multi-Port Autonomous Reconfigurable Solar PV System for Renewable Energy Integration in Hybrid AC/DC System," 2023 9th International Conference on Electrical Energy Systems (ICEES), Chennai, India, 2023, pp. 687-693, **doi: 10.1109/ICEES57979.2023.10110073. (WEB OF SCIENCE INDEXED)**

- **6.** T. Muthamizhan, B. Shivaji and **M. Aijaz**, "Fuzzy logic controller based Multilevel Inverters integrated Speed Control of Induction Motors," 2022 3rd International Conference for Emerging Technology (INCET), Belgaum, India, 2022, pp. 1-7, **doi: 10.1109/INCET54531.2022.9824251.** (SCOPUS INDEXED)
- **7. M. Aijaz**, T. Muthamizhan, T. Venkateswarlu, D. S. Prasad, P. Rathnavel and A. Sivakumar, "Performance Improvement in Fuzzy Logic Controller based Grid-connected Solar Photovoltaic System with Fractional Order Notch Filter," 2022 International Conference on Computer, Power and Communications (ICCPC), Chennai, India, 2022, pp. 306-312, **doi: 10.1109/ICCPC55978.2022.10072119.** (SCOPUS INDEXED)
- **8. Aijaz, M.**, Muthamizhan, T., Venkateswarlu, T. (2022). An Intelligent Fuzzy Controlled Microgrid Fed by Distribution Generation Sources. In: Subramani, C., Vijayakumar, K., Dakyo, B., Dash, S.S. (eds) Proceedings of International Conference on Power Electronics and Renewable Energy Systems. Lecture Notes in Electrical Engineering, vol 795. Springer, Singapore. https://doi.org/10.1007/978-981-16-4943-1 **43.** (SCOPUS INDEXED)
- **9.** T. Muthamizhan, **M. Aijaz** and A. Sivakumar, "Artificial Intelligence Integrated Control to PMSG Built Wind Energy Conversion Scheme," 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT), Bangalore, India, 2022, pp. 1-7, **doi: 10.1109/GCAT55367.2022.9971952.** (SCOPUS INDEXED)
- **10.**N. Mahesh Babu, **M. Aijaz** and T. Muthamizhan, "Fuzzy Logic Controller Based 3-Phase 4-Wire Inverter for Enhancing the Reactive Power Injecting Capability in Asymetrical Voltage Sag," 2021 2nd Global Conference for Advancement in Technology (GCAT), Bangalore, India, 2021, pp. 1-6, **doi: 10.1109/GCAT52182.2021.9587511.** (SCOPUS INDEXED)
- **11.**T. Muthamizhan, M. J. Kumar, P. Rathnavel, **M. Aijaz** and A. Sivakumar, "A Photovoltaic fed High Gain Bidirectional DC/DC Converter on EV Charging stations Applications," 2021 2nd Global Conference for Advancement in Technology (GCAT), Bangalore, India, 2021, pp. 1-6, **doi: 10.1109/GCAT52182.2021.9587699.** (SCOPUS INDEXED)
- **12.**T. Muthamizhan, **M. Aijaz** and T. Venkateswarlu, "Active Shunt Power Filter Using ANN Controller for Wind Turbine PMSG Interfaced to Grid," 2021 2nd International Conference for Emerging Technology (INCET), Belagavi, India, 2021, pp. 1-7, **doi: 10.1109/INCET51464.2021.9456123.** (SCOPUS INDEXED).
- **13.**SHEKAR, S.C., MUTHAMIZHAN, T., **AIJAZ, M.**, SEKHAR, D.C Wavelet-ANN Based Detection of Fault Location of Hybrid Renewable Energy Sources Connected Power Transmission System. *International Journal of Renewable Energy Research*, 2024, 14(3), pp. 551–562https://doi.org/10.20508/ijrer.v14i3.14396.g8921 (**WEB OF SCIENCE INDEXED**)
- **14.**M. M. Krishnan, T. Muthamizhan, **M. Aijaz**, G. G and A. V, "Algorithmic Optimization and Synthesis Strategies for High-Performance Computing Integrated Circuit Design," *2024 Second International Conference Computational and Characterization Techniques in Engineering & Sciences (IC3TES), Lucknow*, India, 2024, pp. 1-5, **doi: 10.1109/IC3TES62412.2024.10877542.** (SCOPUS INDEXED)
- **15.M. Aijaz**, G. G, A. V, M. M. Krishnan and T. Muthamizhan, "Innovative Circuit Designs for Achieving Ultra-Low Power Consumption in Wearable Electronics," *2024 International Conference on Cybernation and Computation (CYBERCOM)*, Dehradun, India, 2024, pp. 649-653, **doi: 10.1109/CYBERCOM63683.2024.10803200.** (SCOPUS INDEXED)
- **16.**A. V, M. M. Krishnan, T. Muthamizhan, **M. Aijaz** and G. G, "Cutting-Edge Innovations in Biomedical Sensing Technologies for Enhanced Remote Healthcare Monitoring," *2024 International Conference on Cybernation and Computation (CYBERCOM)*, Dehradun, India, 2024, pp. 683-687, **doi: 10.1109/CYBERCOM63683.2024.10803181.** (SCOPUS INDEXED)
- **17.**T. Muthamizhan, **M. Aijaz**, G. G, A. V and M. M. Krishnan, "Optimization Techniques and Algorithmic Control in Power Electronics for Renewable Energy Systems," *2024 Second International Conference Computational and Characterization Techniques in Engineering & Sciences (IC3TES)*, Lucknow, India, 2024, pp. 1-5, **doi: 10.1109/IC3TES62412.2024.10877626.** (SCOPUS INDEXED)

18.M. M. Krishnan, T. Muthamizhan, **M. Aijaz**, G. Guna. and V. Anusharani, "Algorithmic Techniques for Power Management and Optimization in Low-Power VLSI Design for Energy-Efficient Systems," *2024 International Conference on Cybernation and Computation (CYBERCOM)*, Dehradun, India, 2024, pp. 688-693, **doi: 10.1109/CYBERCOM63683.2024.10803130.** (SCOPUS INDEXED).