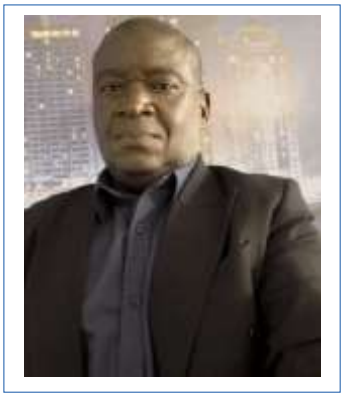
Dr. Liston Matindife



Contacts: Email: liston.matindife@nust.ac.zw. Phone: +263 09 282842 ext. 2427. Mobile: +263 773 640 445

Qualifications: Doctor of Philosophy in Electrical and Electronic Engineering.

University of Johannesburg, South Africa, 2021.

Specialization: Machine learning and computational intelligence in power systems load control.

Research Interests: Machine-learning, computer vision, applied electromagnetics, renewables and smart-grids, power electronics, electric-vehicle technology and energy storage systems

PUBLISHED ARTICLES

A. REFEREED JOURNALS

1) L. Matindife, Y. Sun and Z. Wang, Fuzzy Logic System for Intermixed Biogas and Photovoltaics Measurement and Control, HINDAWI JOURNAL OF MATHEMATICAL PROBLEMS IN ENGINEERING, Vol. **2018**, pp. 1-18. (ISI master indexed journal)

2) L. Matindife and Z. Wang, Fuzzy Logic Algorithms Based Measurement and Control System Design for Intermixed Biogas and Photovoltaic Systems, SCIENCE DIRECT, PROCEDIA MANUFACTURING **2017**, vol.7, pp. 339-344.

3) Matindife, L., Yanxia, S. & Wang, Z. (2020), A Machine-Learning Based Nonintrusive Smart Home Appliance Status Recognition. *Mathematical Problems in Engineering* **2020**, 1-21. (ISI master indexed journal)

4) Matindife, L., Sun, Y. & Wang, Z. (2021), Image-based mains signal disaggregation and load recognition. *Complex Intell. Syst.* **7,** 901–927. https://doi.org/10.1007/s40747-020-00254-0 (ISI master indexed journal)

5) Matindife, L., Sun, Y. & Wang, Z. (2022), Few-Shot Learning for Image-Based Nonintrusive Appliance Signal Recognition. *Computational Intelligence and Neuroscience* **2022**, 1-14. https://doi.org/10.1155/2022/2142935

B. PEER REVIEWED CONFERENCE PAPERS

1) Matindife, L., Sun, Y. & Wang, Z. (2020), Disaggregated Power System Signal Recognition Using Capsule Network. In' Zhang H., Zhang Z., Wu Z., Hao T. (eds) Neural Computing for Advanced Applications. NCAA 2020. Communications in Computer and Information Science, Springer, Singapore'. **1265**, pp. 345-356. https://doi.org/10.1007/978-981-15-7670-6_29

2) L. Matindife and Z. Wang, Biogas System Fault Detection and Control, THE SECOND IEEE INTERNATIONAL CONFERENCE ON ADVANCES IN COMPUTING, COMMUNICATION AND ENGINEERING, pp. 231-235, 28 – 29 NOVEMBER 2016, DURBAN, SOUTH AFRICA.

3) L. Matindife and Z. Wang, Fuzzy logic SOLAR Panel and Battery Control system design, PROCEEDINGS OF THE IEEE 2017 INTERNATIONAL CONFERENCE ON MACHINE LEARNING AND CYBERNETICS, NINGBO, CHINA, 9-12 JULY, 2017.