

M.W.P MADURANGA – CURRICULUM VITAE

CONTACT

Position: Lecturer(Prob.), Department of Computer Engineering, General Sir John Kotelawala Defence University
Address: 15/6,Dhammika,Barawakumbuka,Embilipitiya, Sri Lanka
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EDUCATION

- MS.c.Eng. in Electrical and Electronic Engineering, *University of Peradeniya*, Sri Lanka 2017
- BS.c.Eng(Hons.) in Electronic Engineering, *Asian Institute of Technology(AIT)*, Thailand 2013
- Chartered Engineer, *Engineering Council*, UK 2020

RESEARCH INTEREST

- IoT Applications.
- Machine Learning in IoT.
- Embedded Systems.

RESEARCH EXPERIENCE

- Member-Internet of Things Research Group, Faculty of Computing, KDU.
- Research Grants: KDU Research Grant 2020, Project-"Designing of Energy Efficient IoT Sensor Node" collaborate with Mr.R.P.S Kathriarachchi.
- Bangkok University, Thailand. Project:"Power Management in Wireless Sensor Networks" collaborate with Dr.Poompat Saengudomlert

WORK EXPERIENCE

- Lecturer(prob.), Department of Computer Engineering, General Sir John Kotelawala Defence University April.2020–Present
- Lecturer(prob.), Department of Electrical and Electronic Technology, University of Vocational Technology Sept.2014–April.2020
- Graduate Research Assistant, BUCROCCS, Bangkok University, Thailand Feb.2018–March. 2018
- Temporary Instructor, Dept. of Electronic Telecommunication University of Moratuwa, Sri Lanka 2013–2014
- Intern, Nokia Solutions Networks (NSN), Bangkok, Thailand. March 2013–July 2013
- Trainee Engineer, Dialog Axiata PLC, Sri Lanka June 2012–Aug. 2012

TRAINING

- Artificial Intelligence for Businesses- Udemy(online) 2020
- Data Science A-Z- Udemy(online) 2020
- Machine Learning A-Z- Udemy(online) 2020
- Modeling Wireless Sensor Network with NS3-Engineering Research Unit, University of Moratuwa 2017
- Certificate in Teaching Higher Education- University of Sri Jayawardenapura 2016
- CPD course on “Modern Electronic Components” Arthur C Clark Center , Moratuwa 2015
- CPD course in Industrial Electronics at German Malaysian Institute (GMI), Malaysia 2015

SKILLS

- Programming: Python(Pandas,Numpy,Scipy)MATLAB,Arduino, C
- Tools: TensorFlow,Tableu, Power BI
- Hardware Programming: ESP8266, Raspberry , Arduino

PROFESSIONAL MEMBERSHIPS

- MIEEE,CEng.MIET,MCSSL

PUBLICATIONS

CONFERENCE PAPERS

1. M.W.P. Maduranga and Thushara Pathirathne “Design Simulation of a SEPIC Converter for Home Solar PV System” *27th Annual Technical Conference, IET Sri Lanka Network*, 2020.
2. M.W.P. Maduranga,D.Pandithage “Design of PABX Sustum using Single Board Computer” *27th Annual Technical Conference, IET Sri Lanka Network*, 2020.
3. M.W.P. Maduranga and Thushara Pathirathne “ RSSI and Feed Forward Neural Network (FFNN) Based Indoor Localization in WSN” *2019 National Information Technology Conference (NITC)*, 2019.
RSSI and Feed Forward Neural Network (FFNN) Based Indoor Localization in WSN
4. M.W.P. Maduranga, P.Saengudomlert and H.M.N Dilum Bandara “Redundant Node Management in Wireless Sensor Networks with Multiple Sensor Types” *IEEE National IT Conference (NITC-2018)*, 2018.
5. M.W.P. Maduranga and Y.S.P Weerasinghe “IoT Based Smart Water Metering System for National Water Supply and Drainage Board Sri Lanka” *5th International Conference on Engineering and Technology,Colombo, Sri Lanka*, 2018.
6. S.P.P Silva and M.W.P. Maduranga “Implementing Digital Head End System to Improve the Video Quality of Analog MATV Systems” *The 3rd Research Symposium 2018, University of Vocational Technology*, 2018.
7. M.W.P. Maduranga , Ashan Arthanayake and Ravindra Koggalage “A Sequential Algorithm Based Approach for Exam Time Table Scheduling in University of Vocational Technology” *The 3rd Research Symposium 2018, University of Vocational Technology*, 2018.
8. M.W.P. Maduranga and Roshan G. Ragel“Comparison of load balancing algorithm on Raspberry Pi clustered embedded web servers” *20th IEEE International Computer Science and Engineering Conference (ICSEC), 2016 Chiang Mai, Thailand*, 2016.
9. Huy Q. Nguyen, S. P. Kasthuri Arachchi and M.W.P. Maduranga,Timothy K. Shih“Animal Behavior Video Classification by Spatial LSTM” *Kelaniya International Conference on Advances in Computing and Technology(KICACT), Sri Lanka*, 2016.

10. D.D.V.P Gunavardena and Maduranga M.W.P “Towards Smart Home Applications: Design and Implement a Smart Electrical Energy Monitoring Device for Domestic Usage” *Research Symposium on Engineering Advancements (RSEA 2015), Sri Lanka*, 2015.
11. Y.S.P Weerasinge and M.W.P. Maduranga “Design and Implementation of a Smart Trainer to Study the Flow Control in Data Link Layer” *Research Symposium on Engineering Advancements (RSEA 2015), Malabe, Sri Lanka*, 2015. (Best paper awards).
12. Weerasinghe Y.S.P, Nanayakkara G.D and Maduranga M.W.P “Design and Implementing a Microcontroller Based Smart ECG Adaptor for Healthcare” *RITSCON 2015, University of Ruhuna, Sri Lanka*, 2014.
13. M.W.P Maduranga, Taparugssanagorn.A “RFID Localization Estimation Techniques for Indoor Environment” *KDU-IRC ,Ratmalana, Sri Lanka*, 2014.
14. M.W.P Maduranga, M.Gamage “Study on a National SMS HUB solution for bulk SMS and National policies on SMS Regulatory in Sri Lanka” *RSEA 2013, Malabe, Sri Lanka*, 2013.

PROFESSIONAL SERVICE

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|---|--------------|
| 1. Chartered Engineer , Registered in Lanka Electricity Company Private Limited | 2020–To Date |
| 2. Member, TEC, Ministry of Education Sri Lanka | 2017–2019 |
| 3. Judge Panel Member, Sri Lanka Inventors Commission | 2017–To Date |
| 4. Project Supervisor, Bachelor of Information Technology (BIT) program, University of Moratuwa | 2019–To Date |

REFEREES

1. Prof.Roshan Ragel, Professor, Department of Computer Engineering Faculty of Engineering University of Peradeniya Email: roshanr@pdn.ac.lk
2. Dr.Poompat Saengudomlert. Professor Bangkok University Center of Research in Optoelectronics, Communications and Computational Systems (BU-CROCCS) Bangkok University, Pathumthani, Thailand Email: poompat.s@bu.ac.th