

Sheikh Shanawaz Mostafa

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Google scholar: <https://goo.gl/k3pYcW>

EDUCATION

2016-2020 Instituto Superior Técnico at the University of Lisbon, Portugal.

Doctor of Philosophy in Electrical and Computer Engineering

Networked Interactive Cyber Physical Systems which is a collaboration between Instituto Superior Técnico and Carnegie Mellon University Partnership.

CGPA 17 in the scale of 20 (in the Portuguese system 20 is the best grade)

Thesis Title: "Obstructive sleep apnea detection using fourth level devices". (**Pass with Distinction**)

2010-2012 Khulna University of Engineering & Technology (KUET), Bangladesh.

Master of Science in Biomedical Engineering (1.5 years course)

CGPA 3.33 in the scale of 4.00. (Like the American style 4 is the best grade) (~16.65 out of 20)

Thesis Title: "Clench Strength Prediction for Prosthesis Hand using Surface Electrode Electromyogram".

2006-2010 Khulna University, Khulna-9208, Bangladesh.

Bachelor of Science (B.Sc.) in Electronics & Communication Engineering (ECE) (4 years course)

CGPA 3.38 in the scale of 4.00 (Like the American style 4 is the best grade) (~16.9 out of 20)

Thesis Title: "An Efficient Paging Algorithm for multi-Carrier CDMA System".

RELEVANT WORK EXPERIENCE

Mar 2021- current **Postdoctoral Researcher (R2)**

ITI - Interactive Technologies Institute Contract

Current Working Projects

- MTL (Marítimo Training LAB), Regional Project MTL, M1420-01-0247-FEDER-000033, co-financed by Madeira 14-20.
- RRSO – Restaurant Review Sentiment Output, Prociencia Program with the company Zomato.
- BASE – BANana Sensing, in partnership with GESBA-Empresa de Gestão do Sector da Banana, PRODERAM/FEADER (1/6/2021-30/6/2023)
- Portuguese Foundation of Science and Technology (FCT) 'Sentiment and Rating Understanding of Portuguese Review for Restaurants using Machine Learning and Natural Language Processing.' - 25000.00 USD
- Partner of Sleep Revolution project.

Jan 2021- Feb 2021 **Postdoctoral Researcher (R2)**

Project MTL (Marítimo Training LAB)

Nov 2019- Dec 2020 **Researcher (R1)**

Project "MITIExcell", Sleep Analysis

Madeira Interactive Technologies Institute, Funchal – Portugal.

Jul 2018- Feb 2019 **Invited Lecturer**

Nov 2015- Oct 2019 Ph.D. Researcher (R1)

Was funded by ARDITI for pursuing a Ph.D. Research under Networked Interactive Cyber Physical Systems program in Instituto Superior Técnico.

Oct 2014- Aug 2015 Researcher (R1)

Project "Vision 3D", Funded through +Knowledge program with the company AWAIBA Lda (currently AMS). Madeira Interactive Technologies Institute, Funchal – Portugal.

Dec 2011- Nov 2012 Research Assistant

Project "Performance of Different Bio-signals on Different Physiological and Mental State", funded by University Grants Commission (UGC) of Bangladesh. Khulna University of Engineering & Technology (KUET) Khulna-9203, Bangladesh.

Jul 2010- Nov 2011 Teaching Assistant

Department of Biomedical Engineering, Khulna University of Engineering & Technology (KUET) Khulna-9203, Bangladesh.

RESEARCH FUNDING

- Portuguese Foundation of Science and Technology (FCT) 'Sentiment and Rating Understanding of Portuguese Review for Restaurants using Machine Learning and Natural Language Processing.' -25000 USD

SUPERVISION, MENTORING AND SUMMER INTERN:

Ph.D. Thesis:

- Décio Damasceno Mendonça Alves (Ph.D. Student, UMA): 'Very Short-Range Forecasting of Wind Speed and Direction for Air Traffic Operations at Madeira Airport' (tentative)

M.Sc. Thesis:

- Marcos Diogo Santos Silva (M.Sc. Student, UMA): 'Exploratory data analysis for food reviews in the perspective of restaurants owners' (tentative)
- Diogo Mattew (M.Sc. Student, UMA): 'Fault Tolerant Distributed Machine Learning using Cluster and Federated Learning' (tentative)

Summer intern:

- Diogo Mattew (ITI - Interactive Technologies Institute) : 'Development of a distributed machine learning system using a cluster.'

VOLUNTEERING

Journal Editorial:

- Special Issue Editor: Journal 'Signals', Special Issue "Deep Learning and Transfer Learning" (https://www.mdpi.com/journal/signals/special_issues/Deep_Learning_Transfer_Learning)
- Special Issue Editor: Journal 'International Journal of Environmental Research and Public Health', Special Issue "Applications of Artificial Intelligence to Health" (https://www.mdpi.com/journal/ijerph/special_issues/Artificial_Intelligence_Health)
- Special Issue Editor: Journal 'Electronics', Special Issue "Applications in Biomedical Signal Processing" (https://www.mdpi.com/journal/electronics/special_issues/YS1Z437696)

Workshop Organizer and Speaker:

- Jul 2022: Madeira International Workshop in Machine Learning 2022 (<https://mml.iknowd.org>)

- Jul 2021: Madeira International Workshop in Machine Learning 2021 (https://iknowd.org/tccf_21/mml_21)

Conference organizer:

- Jul 2019: 3rd International Conference in Engineering Applications – ICEA19 3rd International Conference in Engineering Applications – ICEA19 · (<https://iknowd.org/event/international-conference-in-engineering-applications>)
- Jul 2018: International Conference on Biomedical Engineering and Applications 2018 (<https://iknowd.org/icbea/ieee-international-conference-on-biomedical-engineering-and-applications-july-2018-funchal-madeira-portugal>)
- Jul 2017: International Work Conference on Bioinspired Intelligence – IWOB2017 International Work Conference on Bioinspired Intelligence – IWOB2017 Jul 2017 · (<https://iwobi.ulpgc.es/2017/index.php/committ>)

CLUBS & SOCIETIES

- **Board Member** Institute of Knowledge and Development (IKnowD) (<https://iknowd.org/about-us>)
- **Member of Institute of Electrical and Electronics Engineers (IEEE)**, membership number: 93872891.
- **Associated Member of Bangladesh Computer Society (BCS)**, membership number: 08613.
- **Member of the International Association of Engineers (IAENG)**, membership number: 112961.

QUALIFICATIONS & AWARDS

- **Ph.D. thesis Pass with Distinction** for “Obstructive sleep apnea detection using fourth level devices”.
- **Oct 2017 1st Telefónica Chair Competition** of the University of Las Palmas de Gran Canaria, Spain. Won 1st prize in the 'Innovation / Research Project' category for "Analysis of sleep quality and diagnosis of obstructive apnea from an artificial intelligence system of low cost and minimal complexity".
- **July 2017 Best student Paper award** in International Conference and Workshop on Bioinspired Intelligence. The award was given to the paper “A minimally invasive portable system for sleep apnea detection”.

KEY SKILLS

Research Skills

- Data collection.
- Report writing.
- Critical thinking.
- Review different work and Analysis of information from different sources.
- Planning and scheduling.
- Managing small groups of people

Language Skills

- Matlab (Advanced).
- VHDL (Good).
- Python (Advanced).

Hardware and prototyping Skills

- Field Programmable Gate Array (Good).
- Microcontrollers (Moderate).
- Fusion 360 (Moderate).

LANGUAGES

- Bangla, (Mother Tongue)
- English (Fluent)
- Portuguese (Basic)

PUBLICATIONS

Peer reviewed Journal

- [1] P Baglat, A Hayat, F Mendonça, A Gupta, **SS Mostafa**, F Morgado-Dias, “**Non-Destructive Banana Ripeness Detection Using Shallow and Deep Learning: A Systematic Review**” . *Sensors* 2023, 23, 738. <https://doi.org/10.3390/s23020738> (IF: 3.847, Q2)
- [2] A Hayat, P Baglat, F Mendonça, **SS Mostafa**, F. Morgado-Dias, “**Novel Comparative Study for the Detection of COVID-19 Using CT Scan and Chest X-ray Images**”. *Int. J. Environ. Res. Public Health* **2023**, 20, 1268. <https://doi.org/10.3390/ijerph20021268> (IF: 4.614, Q1)
- [3] F Mendonça, **SS Mostafa**, A Gupta, ES Arnardóttir, T Leppänen, , F Morgado-Dias, A.G. Ravelo-García, “**API: an Alternative View for Sleep Stability Analysis based on Automatic Detection of the A-Phases from the Cyclic Alternating Pattern**”, *Sleep*, 2022, zsac217, DOI: 10.1093/sleep/zsac217 (IF: 6.313, Q1)
- [4] F Mendonça, **S.S.Mostafa**, D Freitas, F Morgado-Dias, A.G. Ravelo-García, “**Multiple Time Series Fusion Based on LSTM: An Application to CAP A Phase Classification Using EEG**”, *Int. J. Environ. Res. Public Health* **2022**, 19, 10892. <https://doi.org/10.3390/ijerph191710892> (IF: 4.614, Q1)
- [5] F Mendonça. **S.S.Mostafa**, D. Freitas, , F Morgado-Dias, A.G. Ravelo-García, “**Heuristic Optimization of Deep and Shallow Classifiers: An Application for Electroencephalogram Cyclic Alternating Pattern Detection**”, *Entropy* **2022**, 24, 688. DOI:10.3390/e24050688 (IF:2.738, Q2)
- [6] JA Faysal, ST Mostafa, JS Tamanna, KM Mumenin, M Arifin, MA Awal, A Shome, **SS Mostafa**, “**XGB-RF: A Hybrid Machine Learning Approach for IoT Intrusion Detection**”, *Telecom*, Volume 3, Issue 1, pp 52-69. DOI: 10.3390/telecom3010003
- [7] MA Awal, **SS Mostafa**, M Ahmad, MA Alahe, MA Rashid, AZ Kouzani, MAP Mahmud, “**Design and Optimization of ECG Modeling for Generating Different Cardiac Dysrhythmias**”, *Sensors*. 2021; 21(5):1638. DOI: 10.3390/s21051638 (IF:3.275, Q1)
- [8] F Mendonça, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**A method based on cardiopulmonary coupling analysis for sleep quality assessment with FPGA implementation**”, *Artificial Intelligence in Medicine*, DOI: 10.1016/j.artmed.2021.102019. (IF:4.383, Q1)
- [9] F Mendonça, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**On the use of patterns obtained from LSTM and feature-based methods for time series analysis: application in automatic classification of the CAP A phase subtypes**”, *Journal of Neural Engineering*, DOI: 10.1088/1741-2552/abd047 (IF: 4.141, Q1)
- [10]**SS Mostafa**, D Baptista, AG Ravelo-García, G.Juliá-Serdá, F. Morgado-Dias, “**Greedy based convolutional neural network optimization for detecting apnea**”, *Computer Methods and Programs in Biomedicine* 197, 105640 (IF: 3.632, Q1)
- [11]F Mendonça, **SS Mostafa**, F. Morgado-Dias, AG Ravelo-García, “**Cyclic alternating pattern estimation based on a probabilistic model over an EEG signal**”, *Biomedical Signal Processing and Control*, Vol 62, 102063, 2020, DOI: 10.1016/j.bspc.2020.102063 (IF: 3.137, Q2)

- [12]F Mendonça, **SS Mostafa**, F. Morgado-Dias, G.Juliá-Serdá, AG Ravelo-García, “**A Method for Sleep Quality Analysis Based on CNN Ensemble With Implementation in a Portable Wireless Device**” IEEE Access, Vol:8, 2020, DOI: 10.1109/ACCESS.2020.3019734, (IF: 3.745, Q1)
- [13]**SS Mostafa**, F Mendonça, F. Morgado-Dias, G. Juliá-Serdá, AG Ravelo-García, “**Multi-Objective Hyperparameter Optimization of Convolutional Neural Network for Obstructive Sleep Apnea Detection**”, IEEE Access, Vol:8, 129586-129599, 2020, DOI: 10.1109/ACCESS.2020.3009149, (IF: 3.745, Q1)
- [14]F Mendonça, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**Matrix of Lags: A tool for analysis of multiple dependent time series applied for CAP scoring**”, Computer Methods and Programs in Biomedicine, Vol: 189, 2020, DOI: 10.1016/j.cmpb.2020.105314, (IF: 3.632, Q1)
- [15]F Mendonça, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**An oximetry based wireless device for sleep apnea detection**”, Sensors, Vol: 20, Issue: 3, 2020, DOI: 10.3390/s20030888, (IF: 3.275, Q1)
- [16]F Mendonça, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**A Portable Wireless Device for Cyclic Alternating Pattern Estimation from an EEG Monopolar Derivation**”, Entropy, Vol: 21, Issue:12, 2019, DOI: 10.3390/e21121203, (IF: 2.494, Q2)
- [17]**SS Mostafa**, F Mendonça, G.Juliá-Serdá, F. Morgado-Dias, AG Ravelo-García, “**SC3: self-configuring classifier combination for obstructive sleep apnea**”, Neural Computing and Applications, 2019, DOI: 10.1007/s00521-019-04582-2 (IF: 4.774, Q1)
- [18]F Mendonça, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, T Penzel, “**Sleep quality of subjects with and without sleep-disordered breathing based on the cyclic alternating pattern rate estimation from single-lead ECG**”, Physiological Measurement, Volume 40, Number 10, 2019, DOI: 10.1088/1361-6579/ab4f08 (IF: 2.309, Q3)
- [19]**SS Mostafa**, F Mendonça, AG Ravelo-García, F. Morgado-Dias, “**A Systematic Review of Detecting Sleep Apnea Using Deep Learning**”, Sensors, vol 19, Issue: 22, 2019, DOI: 10.3390/s19224934 (IF: 3.275, Q1)
- [20]F. Mendonça, **SS Mostafa**, F. Morgado-Dias, A. G Ravelo-García, Thomas Penzel “**A Review of Approaches for Sleep Quality Analysis**”, IEEE Access, 2019, DOI: 10.1109/ACCESS.2019.2900345, (IF:3.557, Q1)
- [21]F Mendonça, **SS Mostafa**, AG Ravelo-García, F Morgado-Dias, T Penzel, “**A Review of Obstructive Sleep Apnea Detection Approaches**”, IEEE Journal of Biomedical and Health Informatics, 2019. DOI: 10.1109/JBHI.2018.2823265. (IF: 3.850, Q1)
- [22]F. Mendonça, **SS Mostafa**, F. Morgado-Dias, A. G Ravelo-García, “**Sleep quality estimation by cardiopulmonary coupling analysis**”, IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018. DOI: 10.1109/TNSRE.2018.2881361. (IF: 3.972, Q1)
- [23]D Baptista, **SS Mostafa**, L Pereira, L Sousa, F Morgado-Dias, “**Implementation Strategy of Convolution Neural Networks on Field Programmable Gate Arrays for Appliance Classification Using the Voltage and Current (VI) Trajectory**”, Energies, Vol 11, Issue 9, p 2460, 2018. DOI: 10.3390/en11092460 (IF:2.676, Q2)
- [24] **SS Mostafa**, MA Awal, M Ahmad, and F Morgado-Dias, “**Design of sEMG Based Clench Force Estimator in FPGA using Artificial Neural Networks**”, Neural Computing and Applications, 2018. (IF: 4.213, Q1)
- [25] **SS Mostafa**, N Horta, F Morgado-Dias, AG Ravelo-García, “**Analog Active Filter Design using a Multi Objective Genetic Algorithm**”, International Journal of Electronics and Communications,2018. DOI: 10.1016/j.aeue.2018.06.001 (IF: 2.46, Q1)

- [26] **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**Comparison of SFS and mRMR for oximetry feature selection in obstructive sleep apnea detection**”, Neural Computing and Applications, 2018. (IF: 4.213, Q1).
- [27] F Mendonça, **SS Mostafa**, AG Ravelo-García, F Morgado-Dias, T Penzel, “**Devices for Home Detection of Obstructive Sleep Apnea: A Review**”, Sleep Medicine Reviews, 2018. (IF: 10.602, Q1)
- [28] F Mendonça, **SS Mostafa**, F Morgado-Dias, JL Navarro-Mesa, G. Juliá-Serdá, A G Ravelo-García, “**A portable wireless device based on oximetry for sleep apnea detection**”, Computing, 2018. DOI: 10.1007/s00607-018-0624-7 (IF: 1.654, Q2)
- [29] F Mendonça, A Fred, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**Automatic detection of cyclic alternating pattern**”, Neural Computing and Applications, 2018. DOI: 10.1007/s00521-018-3474-5. (IF: 4.213, Q1)
- [30] **SS Mostafa**, LN Sousa, NF Ferreira, RM Sousa, J Santos, M Wány, F Morgado-Dias, “**Full image-processing pipeline in field-programmable gate array for a small endoscopic camera**”, Journal of Electronic Imaging, vol: 26, Issue: 1. p 013005, 2017. DOI: 10.1117/1.JEI.26.1.013005 (IF: 0.78, Q4)
- [31] **SS Mostafa**, MA Awal, M Ahmad, MA Rashid, “**Voiceless Bangla vowel recognition using sEMG signal**”, SpringerPlus, vol:5, Issue:1, p 1522, 2016. DOI: 10.1186/s40064-016-3170-9. (IF: 1.13, Q2)
- [32] KJ Reza, S Khatun, MF Jamlos, MM Fakir, **SS Mostafa**, “**Performance evaluation of diversified SVM kernel functions for breast tumor early prognosis**”, ARPN Journal of Engineering and Applied Sciences 9 (3), 329-335, 2014.
- [33] MA Awal, **SS Mostafa**, M Ahmad, MA Rashid, “**An adaptive level dependent wavelet thresholding for ECG denoising**”, Biocybernetics and Biomedical Engineering 34 (4), 238-249. DOI: 10.1016/j.bbe.2014.03.002 (IF: 1.432, Q3)
- [34] **SS Mostafa**, M Hossian, KJ Reza, GM Rashid, “**A Radio Based Intelligent Railway Grade Crossing System to Avoid Collision**”, International Journal of Computer Science Issues, vol:7, issue:6, pp 139-143 (arXiv preprint arXiv:1109.0077)
- [35] **SS Mostafa**, KJ Reza, GM Rashid, M Moinuddin, M Amin, AA Nahid, “**An efficient paging algorithm for multi-carrier CDMA system**”, International Journal of Computer Science Issues, vol:8, issue:3, pp 421-426,
- [36] MA Al Ahasan, MA Awal, **SS Mostafa**, “**Implementation of Speech Recognition Based Robotic System**”, International Journal of Computer and Information Technology (IJCIT), vol:1, Issue: 02, pp 16-19, 2011.
- [37] **SS Mostafa**, KJ Reza, M Amin, M Ahmad, “**Intelligent Paging Strategy for Multi-Carrier CDMA System**”, International Journal of Computer Science Issues 8 (1), 254-260. 2011
- [38] MA Awal, **SS Mostafa**, M Ahmad, “**Performance analysis of Savitzky-Golay smoothing filter using ECG signal**”, International Journal of Computer and Information Technology 1 (02), 24-29, 2011.
- [39] **SS Mostafa**, KJ Reza, AA Tanvir, “**A Multi-Platform Mobile Banking Framework for Bangladesh**”, JOURNAL OF TELECOMMUNICATIONS 3 (1), 90-94, 2010.

Conference (International Conference Full paper)

- [1] F Mendonça, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**Cyclic Alternating Pattern Estimation from One EEG Monopolar Derivation Using a Long Short-Term Memory**”, 2019 International Conference in Engineering Applications (ICEA), 1-5
- [2] **SS Mostafa**, F Mendonça, A Ravelo-García, F Morgado-Dias, “**Combination of Deep and Shallow Networks for Cyclic Alternating Patterns Detection**”, 2018 13th APCA International Conference on Control and Soft Computing (CONTROLO), pp 98-103, 2018

- [3] F Mendonça, **SS Mostafa**, F Morgado-Dias and A Ravelo-García, “**Sleep Quality Analysis with Cardiopulmonary Coupling**”, International Conference on Biomedical Engineering and Applications, 2018.
- [4] K J Reza, **SS Mostafa**, M H Milon, S Khatun and M F Jamlos, “**Scattering Behaviour Analysis for UWB Antenna in the Vicinity of Heterogeneous Breast Tissues**”, International Conference on Biomedical Engineering and Applications, 2018.
- [5] F Mendonça, A Fred, **SS Mostafa**, F Morgado-Dias, AG Ravelo-García, “**Automatic Detection of a Phases for CAP Classification**”, Proceedings of the 7th International Conference on Pattern Recognition Applications and Methods (ICPRAM), pp 394-400, Funchal, Portugal.
- [6] **SS Mostafa**, JP Carvalho, F Morgado-Dias, A Ravelo-García, “**Optimization of sleep apnea detection using SpO2 and ANN**”, XXVI International Conference on Information, Communication and Automation Technologies (ICAT), pp. 1-6, Sarajevo, Bosnia-Herzegovina 2017. DOI: 10.1109/ICAT.2017.8171609
- [7] **SS Mostafa**, F Mendonça, F Morgado-Dias, A Ravelo-García, “**SpO2 based Sleep Apnea Detection using Deep Learning**” IEEE 21st International Conference on Intelligent Engineering Systems 2017 (INES 2017), pp. 000091-000096, Larnaca, Cyprus. DOI: 10.1109/INES.2017.8118534
- [8] **SS Mostafa**, MA Awal, M Ahmad, F Morgado-Dias, “**A Method for Designing EMG Integrator using an FPGA**”, 2017 International Conference and Workshop on Bioinspired Intelligence (IWOBI), pp. 1-6, Funchal, Portugal. DOI: 10.1109/IWOBI.2017.7985523
- [9] F Mendonça, **SS Mostafa**, F Morgado-Dias, J Navarro-Mesa, G Julia-Serda, A Ravelo-García “**A minimally invasive portable system for sleep apnea detection**” 2017 International Conference and Workshop on Bioinspired Intelligence (IWOBI), pp. 1-5, Funchal, Portugal. DOI: 10.1109/IWOBI.2017.7985524
- [10] **SS Mostafa**, LN Sousa, NF Ferreira, RM Sousa, J Santos, F Morgado-Dias, M. Wäny, “**FPGA Implementation of Gamma Correction using a Piecewise Linear Approach for a Small Size Endoscopic Camera**”, Electronic Imaging, Image Sensors and Imaging Systems 2016, pp. 1-6(6), San Francisco, USA. DOI: 10.2352/ISSN.2470-1173.2016.12.IMSE-276
- [11] M Islam, T Ahmed, **SS Mostafa**, MSU Yusuf, M Ahmad, “**Human emotion recognition using frequency & statistical measures of EEG signal**”, 2013 International Conference on Informatics, Electronics & Vision (ICIEV), pp 1-6, Dhaka Bangladesh. DOI: 10.1109/ICIEV.2013.6572658
- [12] **SS Mostafa**, M Ahmad, MA Awal, “**Clench force estimation by surface electromyography for neural prosthesis hand**”, 2012 International Conference on Informatics, Electronics & Vision (ICIEV), pp 505-510, Dhaka Bangladesh. DOI: 10.1109/ICIEV.2012.6317489
- [13] T T K Munia, A Islam, M M Islam, **S S Mostafa**, M Ahmad, “**Mental states estimation with the variation of physiological signals**”, 2012 International Conference on Informatics, Electronics & Vision (ICIEV), pp 800-805, Dhaka Bangladesh. DOI: 10.1109/ICIEV.2012.6317333
- [14] **SS Mostafa**, MA Awal, MM Islam, M Ahmad, “**Correlation of Heart-rate and Cardiac Cycle Duration under Different Body Positions and Breathing**”, International Conference on Advances in Electrical Engineering, 2011, pp 246-251, Dhaka Bangladesh.
- [15] MA Awal, **SS Mostafa**, M Ahmad, “**Quality Assessment of ECG Signal using Symlet Wavelet Transform**”, International Conference on Advances in Electrical Engineering, pp 129-134, Dhaka Bangladesh.
- [16] A Awal, **SS Mostafa**, M Ahmad, “**Simplified mathematical model for generating ECG signal and fitting the model using nonlinear least square technique**”, International Conference on Mechanical Engineering (ICME), pp 1-6, Dhaka, Bangladesh.

National Conference (Conference Full paper)

- [1] **SS Mostafa**, M.M. Hossain, “**A Radio-Based Railway Crossing Control System to Reduce Accident**”, Conference on Engineering Research, Innovation and Education, p 297, Sylhet, Bangladesh, 2010.
- [2] MA Awal, **SS Mostafa**, M Maniruzzaman, “**E-Health in Bangladesh: Possibilities**”, Conference on Engineering Research, Innovation and Education, p 677, Sylhet, Bangladesh. 2010
- [3] HHI Habib, S. Khan, J. Ibna Kalam, **S.S. Mostafa**, M.M. Mobarak, “**An Analysis and Comparison of Wireless Multi-Hop MAC Protocol for Emergency Networks**”, Conference on Engineering Research, Innovation and Education, p 305, 2010

Patent application in progress

- [1] ‘**Data fusion for banana harvesting**’. with Altice Labs (<https://www.alticelabs.com/>) and GESBA – Empresa de Gestão do Sector da Banana (Management Company of the Banana Sector, - Madeira) (<https://dica.madeira.gov.pt/index.php/outros-temas/diversos/685-gesba-empresa-degestao-do-sector-da-banana-lda-uma-aposta-no-crescimento-sustentavel-e-continuado-da-bananada-madeirab>) - - provisional patent application(Application number: 20222004337688 Application Date: 20/12/2022 18:28:29).
- [2] ‘**Secure data communication between sensor and classifier**’(tentative) - Currently evaluating by the research institute for patent.

References

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