IoT Based System for Automated Health Monitoring

Synopsis submitted for registration of Doctor of Philosophy (Ph.D) in Electronics & Telecommunication Engineering

(Faculty of Science and Technology)

Sant Gadge Baba Amravati University

Submitted by

Miss. Pranali P. Chavhan

Under Supervision of

Dr. C. M. Jadhao



Submitted to Research Center

Mauli Group of Institutions,

College of Engineering & Technology, Shegaon

College Code 387

when cities/towns are under quarantine. *Infect. Control Hosp. Epidemiol.* 2020:1–18. doi: 10.1017/ice.2020.61

- [15] Allam Z., Jones D.S. On the coronavirus (COVID-19) outbreak and the smart city network: universal data sharing standards coupled with artificial intelligence (AI) to benefit urban health monitoring and management. *Healthcare*. 2020;8(1):46.
- [16] Fatima S.A., Hussain N., Balouch A., Rustam I., Saleem M., Asif M. IoT enabled smart monitoring of coronavirus empowered with fuzzy inference system. *Int. J. Adv. Res. Ideas Innov. Technol.* 2020;6(1)
- [17] Peeri N.C., Shrestha N., Rahman M.S., Zaki R., Tan Z., Bibi S., Baghbanzadeh M., Aghamohammadi N., Zhang W., Haque U. The SARS, MERS and novel coronavirus (COVID-19) epidemics, the newest and biggest global health threats: what lessons have we learned. *Int. J. Epidemiol.* 2020;49(3):717–726. doi: 10.1093/ije/dyaa033.
- [18] Allam Z., Jones D.S. On the coronavirus (COVID-19) outbreak and the smart city network: universal data sharing standards coupled with artificial intelligence (AI) to benefit urban health monitoring and management. *Healthcare*. 2020;8(1):46

Date: 14/8/2021

Place: Shegaon

Miss. Pranali P. Chavhan

PhD Research Scholar

Approved by

Supervisor

Dr. C. M. Jadhao

Head of Research Centre

Dr. C. M. Jadhao

Principal, MGICOET, Shegaon

"Health Prediction Using Digital Health Record"

Synopsis submitted for registration of Doctor of Philosophy (Ph.D) in Electronics & Telecommunication Engineering

(Faculty of Science and Technology)

Sant Gadge Baba Amravati University, Amravati

Submitted by

Pradip Ramesh Bhakare

Under Supervision of

Dr. C. M. Jadhao



Submitted to Research Center

Mauli Group of Institutions, College of Engineering & Technology, Shegaon

College Code 387

[16] Z. Che, Y. Cheng, S. Zhai, Z. Sun and Y. Liu, "Boosting Deep Learning Risk Prediction with Generative Adversarial Networks for Electronic Health Records," 2017 IEEE International Conference on Data Mining (ICDM), 2017, pp. 787-792, doi: 10.1109/ICDM.2017.93.

[17] R. El-Yafouri and L. Klieb, "Electronic medical records adoption and use: Understanding the barriers and the levels of adoption for physicians in the USA," 2014 IEEE 16th International Conference on e-Health Networking, Applications and Services (Healthcom), 2014, pp. 506-512, doi: 10.1109/HealthCom, 2014, 7001894.

[18] M. Chen, Y. Hao, K. Hwang, L. Wang and L. Wang, "Disease Prediction by Machine Learning Over Big Data From Healthcare Communities," in IEEE Access, vol. 5, pp. 8869-8879, 2017, doi: 10.1109/ACCESS.2017.2694446.

[19] Electronic Health Records in India PTS: The future of India https://ehr-india.com/

[20] https://health.economictimes.indiatimes.com/etanalytics/data

Date: 14/08/2021

Place: Shegaon

Pradip R. Bhakare

Name of Research Scholar

Shaloure

Approved By

Dr. C. M. Jadhao

Principal & Professor

Electronics & Telecommunication

Engineering Department

Head of Research Centre

Dr. C. M. Jadhao

Principal MGI COET Shegaon **Principal**

Mauli Group of Institution's, College of Engineering & Technology Shegaon.

"Power transmission line faults detection and classification"

Synopsis submitted for registration of Doctor of Philosophy (Ph.D.) in Electrical Engineering (Faculty of Science and Technology)

Sant Gadge Baba Amravati University

Submitted by

Mr. Vaibhav Ashok Ghodeswar

Under supervision of

Dr.M.A.Beg



Submitted to Research Center

Mauli Group of Institutions,

College of Engineering &Technology, Shegaon

College Code 387

[17]. Yann Qi Chen, Student, Olga Fink, and Giovanni Sansavini IEEE Transactions on Industrial Electronics "Combined Fault Location and Classification for Power Transmission Lines Fault Diagnosis with Integrated Feature Extraction". Volume: 65, Issue: 1, Jan. 2018)

[18]. Haibao Zhai, Xingzhi Wang, Minhui Ge, Shuhai Feng East China Branch Of State Grid Corporation Of China Shanghai, China, "Improved Fault Classification Method in Transmission Line based on K-means Clustering" IEEE 2020 5th Asia Conference on Power and Electrical Engineering (ACPEE) DOI: 10.1109/ACPEE48638.2020.9136514.

[19]. M.N. Mahmud, M.N. Ibrahim, M.K. Osman, Z. Hussain Faculty of Electrical Engineering Universiti Teknologi mara 13500 Permatang Pauh, Pulau Pinang, Malaysia, "Selection of Suitable Features for Fault Classification in Transmission Line". IEEE International Conference on Control System, Computing and Engineering (ICCSCE).

[20]. Mrs.S.Kirubadevi 1, Dr.S.Sutha Department of EEE, University College of Engineering Dindigul, Dindigul, Tamilnadu, India, "Wavelet Based Transmission Line Fault Identification and Classification" International Conference on Computation of Power, Energy Information and Communication (ICCPEIC).

Date: 20. 08. 2021

Place:Shegaon

Mr. Vaibhav Ashok Ghodeswar

Name of Research Scholar

Approved by

Supervisor

Dr.M.A.Beg

Professor and Head

Electrical Engineering Department

Head of 1

Dr.C.M.Jadhao

Principal

Mauli Group of Institution's,
College of Engineering & Technolog;
Shegaon.

"Investigations on Protection Challenges in Power Grid Integrated Renewable Energy Systems"

Synopsis submitted for registration of Doctor of Philosophy (Ph.D.) in Electrical Engineering (Faculty of Science and Technology)

Sant Gadge Baba Amravati University

Submitted by

Mr. Pratik W. Choudhary

Under Supervision of

Dr.M.A.Beg



Submitted to Research Center

Mauli Group of Institutions,

College of Engineering & Technology, Shegaon

College Code 387

Distribution Networks," Transmission and Distribution Conference and Exposition: Latin America, 2004 IEEE/PES, pp. 623-628, 8-11 November 2004.

- [19] P.H. Shah, B.R. Bhalja, "New Adaptive Digital Relaying Scheme to Tackle Recloser-fuse Miscoordination during Distributed Generation Interconnections," IET Generation, Transmission & Distribution, vol. 8,no. 4, pp. 682-688, April 2014.
- [20] A. Sinclair, D. Finney, D. Martin, and P. Sharma, "Distance protection in distribution systems: how it assists with integrating distributed resources," IEEE Transactions on Industry Applications, vol. 50, no. 3,pp. 2186–2196, May. 2014.
- [21] H. H. Zeineldin, Y. A. R. Mohamed, V. Khadkikar, and V. Ravikumar Pandi, "A protection coordination index for evaluating distributed generation impacts on protection for meshed distribution systems," IEEE Transactions on Smart Grid, vol. 4, no. 3, pp. 1523–1532, Sep. 2013.

Date: 20/08/2021

Place:Shegaon

Mr.Pratik W. Choudhary

Name of Research Scholar

Approved by

Supervisor

Dr.M.A.Beg

Professor and Head

Electrical Engineering Department

Mauli Engineering Shegaon Shegaon

Head of Research Centre

Dr.C.M.Jadhao

Principal
Maull Group of Institution's,
College of Engineering & Technolog
Shegaon.

"Detection and Classification of Power Quality Voltage Events"

Synopsis submitted for registration of Doctor of Philosophy (Ph.D.) in Electrical Engineering (Faculty of Science and Technology)

Sant Gadge Baba Amravati University

Submitted by

Ms. Pratyenja S. Ganorkar

Under Supervision of

Dr.M.A.Beg



Submitted to Research Center

Mauli Group of Institutions,

College of Engineering & Technology, Shegaon

College Code 387

[23] W. R. A. Ibrahim and M. M. Morcos, "Artificial intelligence and advanced mathematical tools for power quality applications: A survey," IEEE Trans. Power Del., vol. 17, no. 2, pp. 668-673. Apr. 2002

[24] R. A. Flores, "State of the art in the classification of power quality events, an 20. 10th Int. Conf. Harmonics Quality of Power, 2002, vol. 1, pp. 17–

[25] A. M. Gargoom, N. Ertugrul, and W. L. Soong, "A comparative study on effective signal processing tools for power quality monitoring," in Proc. 11th Eur. Conf. Power Electron. Appl. (EPE), Dresden, Germany, Sep. 11–14, 2005, paper ID

[26] F. Jurado, N. Acero, and B. Ogayar, "Application of signal processing tools for power quality analysis," in Proc. Can. Conf. Elect. Comput. Eng, May 2002, vol. 1, pp. 82–87.

[27] O. Poisson, P. Rioual, and M. Meunier, "Detection and measurement of power pp. 1039–1044, Jul. 2000.

[28] A. M. Gaouda, M. M. A. Salama, M. R. Sultan, and A. Y. Chikhani, "Application of multiresolution signal decomposition for monitoring short-duration variations in 2000.

Tensor Del., vol. 15, no. 2, pp. 478–485, Apr.

[29] A. M. Gaouda, S. H. Kanoun, M. M. A. Salama, and A. Y. Chikhani, "Pattern recognition applications for power system disturbance classification," IEEE Trans. Power Del., vol. 17, no. 3, pp. 677–683, Jul. 2002.

[30] Z.-L. Gaing, "Wavelet-based neural network for power disturbance recognition and classification," IEEE Trans. Power Del., vol. 19, no. 4, pp. 1560–1568, Oct. 2004

Date: 24/08/2021 Place: Shegaon Benetite.

Miss. Pratyenja S. Ghanorkar Name of Research Scholar

Approved by

Supervisor

Dr.M.A.Beg

Professor and Head

Electrical Engineering Department

Mauri Engineering Sheyaon

Head of Research Centre

Dr.C.M.Jadhao

Maull Group of Institution's,
College of Engineering & Technolog
Shearon

Page 8 of 10

Analysis and Mitigation of Voltage events in Electrical Power System

Synopsis submitted for registration of Doctor of Philosophy (Ph.D) in Electrical Engineering

(Faculty of Science and Technology)
Sant Gadge Baba Amravati University
Submitted by

Mr. Sudhir P. Koparkar

Under Supervision of

Dr. M. A. Beg



Submitted to Research Center

Mauli Group of Institutions,

College of Engineering &Technology, Shegaon

College Code 387

Year of admission Jan 2020

- [14] Kiran Babu, Pradip C," Power Conditioner for Voltage Sag/Swell and Harmonic Mitigation", IEEE 2019.
- [15] Sarah Rönnberg, Math Bollen,"Power quality issues in the electric power system of the future", Science direct The Electricity Journal 29 (2016) 49-61.
- [16] Naeem Abas, Saad Dilshad, Adnan Khalidl, Muhammad Shoaib Saleem, Nasrullah Khan, Power Quality Improvement Using Dynamic Voltage Restorer," Access 2020.3022477, IEEE Access.
- [17] Eklas Hossain, Mehmet Rida TÜR, P. Sanjeevaikumar, Selim AY, and Imtiaj Khan," Analysis and Mitigation of Power Quality Issues in Distributed Generation Systems Using Custom Power Devices", Access.2018.2814981, IEEE Access.
- [18] Raj Naidoo and Pragasen Pillay,"A New Method of Voltage Sag and Swell Detection", IEEE transactions on power delivery, vol. 22, no. 2, april 2007 pp(1056-1063).
- [19] S. Elango, Dr. E.Chandra Sekaran," Mitigation of voltage sag using Distribution Static Compensator (D-Statcom)", IEEE 2011.
- [20] S.Praveena, B.Suresh Kumar, "Performance of Custom Power Devices for Power Quality Improvement", IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), pp(912-917).

Date 18-08-2021

Place: Shegaon

Mr. Sudhir P. Koparkar

Edhir

Name of Research Scholar

Supervisor

Dr. M. A. Beg

Professor and Head

Electrical Engineering Department

Approved by

Metall
Engineering
Shogaon

Head of Research Center

Dr. C. M. Jadhao

Principal
Maull Group of Institution's,
College of Engineering & Technology
Shegaon.

Investigations on Machining of Shape Memory Alloy

Synopsis submitted for registration of Doctor of Philosophy (Ph.D) in Mechanical Engineering

(Faculty of Science and Technology)

Sant Gadge Baba Amravati University

Submitted by

Satish P. Pawar

Under Supervision of

Dr. P. M. Ardhapurkar



Submitted to Research Center

Mauli Group of Institutions,

College of Engineering & Technology, Shegaon

College Code-387

[22] Rakesh Chaudhari, Jay Vora, L.N. López de Lacalle, Sakshum Khanna, Vivek K. Patel, Izaro Ayesta," Parametric Optimization and Effect of Nano-Graphene Mixed Dielectric Fluid on Performance of Wire Electrical Discharge Machining Process of Ni55.8Ti Shape Memory Alloy", Materials 2021, 14, 2533. https://doi.org/10.3390/ma14102533

[23] C Naresh, P S C Bose, C S P Rao, "Shape memory alloys: a state of art review",IOP conference series: Material Science and Engineering 149 (2016)

[24] Rakesh Chaudhari, Jay J. Vora, D.M. Parikh, A Review on application of NiTinol Shape Memory Alloy, Recent Advances in Mechanical Infrastructure, PP123-132

Date:20/08/2021

Place: Shegaon

Satish P. Pawar

Research scholar

Approved by

Supervisor

Dr. P. M. Ardhapurkar

Professor & Head

Mechanical Engg Dept



Head of research Centre

Dr. C. M. Jadhao

Principal

MGI-COET, Shegaon

Investigations on Performance of Pillow Plate Heat Exchanger

Synopsis submitted for registration of Doctor of Philosophy (Ph.D) in Mechanical Engineering

(Faculty of Science and Technology)

Sant Gadge Baba Amravati University

Submitted by

Kailas R. Dudhe

Under Supervision of

Dr. P. M. Ardhapurkar



Submitted to Research Center

Mauli Group of Institutions,

College of Engineering & Technology, Shegaon

College Code-387

- [28] Karl Siebeneck, Wjatscheslaw Popov, Tobias Stefanak, and Stephan Scholl "Pillow Plate Heat Exchangers - Investigation of Flow Characteristics and Wetting Behavior at Single-Flow Conditions" Chemie Ingenieur Technik, VL-87 IS-3
- [29] C. Zhang, D. Wang, Y. Han, Y. Zhu & X. Peng (2017) "Experimental and numerical investigation on the exergy and entransy performance of a novel plate heat exchanger" Experimental Heat Transfer, 30:2, 162-177,

Date: 14/08/2021

Place: Shegaon

Kailas R. Dudhe

Research scholar

Approved by

Supervisor

Dr. P. M. Ardhapurkar

Professor & Head

Mechanical Engg Dept



Head of research Centre

Dr. C. M. Jadhao

Principal

MGI-COET, Shegaon