SELF ASSESSMENT REPORT

Name in Full : Dr.Rathaiah. M

Father's Name : M.Jangamaiah

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Qualifications   :

S. No.	Qualification	Year of Passing	Board/University	Division
1	SSC	2002	State board of secondary education A.P	First class with distinction
2	Intermediate/Diploma	2004	State Board of Intermediate A.P.	First class with distinction
3	B. Tech/B.E.	2009	S.V.University, Tirupati.	First class
4	M. Tech/M.E (Control Systems)	2012	J.N.T.U. Ananthapuramu.	First class with distinction
5	Ph.D.	2024	J.N.T.U. Ananthapuramu.	--------

Work Experience:

S.No.	Name of the Organization	Position held	Years of Experience	Nature of work done
1	JNTUACEA	Assistant Professor(A)	14	Teaching

Publications   :

a) International Journals:

1. Venkataramana, K. Nagabhushanam, Dr. R. Kiranmayi & **M. Rathaiah** 'Maximum Power Point Tracking of PV Array Using Hybrid Controller' PENSEE, Volume-51, Issue-4, 442-453, ISSN: 0031-4773, https://app.box.com/s/l7fk7di5j261t22ky2nj7vuabcukwnfl

2. D.Daniyelu, K. Nagabhushanam, Dr. R. Kiranmayi & **M.Rathaiah** "A Novel ANFIS Controller Based Distributed Power Flow Controller for Grid Interfaced Hybrid System"GIS SCIENCE JOURNAL, VOLUME 10, ISSUE 7, 2023https://gisscience.net/volume-10-issue-1-2023/

3. Venkatesh, K. Nagabhushanam, R. Kiranmayi and **M. Rathaiah** "Performance Analysis of Fuzzy Logic Controller Fed EV Charging Station with FRT Capability" Journal of Systems Engineering and Electronicshttps://jseepublisher.com/wp-content/uploads/1-JSEE2159.pdf

4. **M.Rathaiah**, P.Ram Kishore Kumar Reddy & P.Sujatha "Adaptive Fuzzy Controller Design for Solar And Wind Based Hybrid System " International Journal of Engineering & Technology(IJET), 7 (2.24) (2018) 283-290.

5. **M.Rathaiah**, P.Ram Kishore Kumar Reddy & P.Sujatha"Adaptive fuzzy controller design for DFIG based wind energy Conversion system" International Journal of Pure and Applied Mathematics (IJPAM),Volume 118 No. 20 2018, 441-448.

6. **M.Rathaiah**, P.Ram Kishore Kumar Reddy & P.Sujatha "Performance of solar system with incremental conductance MPPT based adaptive fuzzy controller" Journal of Advanced Research in Dynamical and Control Systems,2017 ,pp 1374-1387.

7. **M. Rathaiah**, P. Ram Kishore Kumar Reddy & K.S.R. Anjaneyulu – "Design of Optimum Adaptive Control for DC Motor" International Journal of Electrical Engineering. ISSN 0974-2158 Volume 7, Number 2 (2014), pp. 353-366.

8. Yarrapu Reddy Krishnaveni & **M.Rathaiah**"An enhanced MPPT method combining fractional-order and ANFIS control" International Journal of Pure and Applied Mathematics (IJPAM), Volume 118 No. 20 2018, 1773-1779.

9. M.Showriteja & **M Rathaiah** "Weighted model predictive control for reducing the circulating current in modular multilevel converter" Journal of Advanced Research in Dynamical and Control Systems,2017,pp 1509-1524.

10. D.Haritha & **M Rathaiah** " MPPT control for improving learning efficiency of PMSG WECS based on ANFIS method" Journal of Advanced Research in Dynamical and control systems,2017,Pp 1509-1524.

11. B.Chinnamoulali & **M Rathaiah** "An improved fuzzy based cascade control structure for process with time delay" Journal of Advanced Research in Dynamical and Control Systems,2017,pp 1442-1457.

12. Sugali Shankar Naik, R.Kiranmayi & **M.Rathaiah** "Model Predictive Control of Back-to-Back Converter in PMSG Based Wind Energy System" International Research Journal of Engineering and Technology (IRJET), Volume: 03 Issue: 11 | Nov -2016.

13. P.Likitha, R.Kiranmayi & **M.Rathaiah** "Enhancement of Power system transient stability using Fuzzy logic controlled bridge type fault current limiter" International Journal of Science, Engineering and Technology Research (IJSETR), Volume 5, Issue 11, November 2016.

b) Conferences/Workshops:

1. Participated in the One day faculty development programme on "**AGILE METHODOLOGIES"** held at JNTUA College of engineering Anantapur on 25-Feb-2015.

2. Participated in UGC sponsored one day workshop on "**Robot Dynamics and control"** held at JNTUA College of Engineering, Anantapur on 04-02-2012.

3. Attended one day workshop on "**Smart grid"** organized by the department of Electrical Engineering JNTU Ananthapuramu.

4. Attended One day workshop ''**Awareness on Power Systems Simulation Analysis using Mi Power Software"** held on 22.09.2015 at JNTUA College of Engineering.

5. Attended One day workshop on **"Solar Power Technologies"** held on 20.04.2016 at JNTUA College of Engineering.

6. Attended One day workshop on **"Wind Energy Conversion Systems"** held on 13.04.2016 at JNTUA College of Engineering.

7. Attended One day Didactical programme on "**Crafting Powerful Questions**" held on 16th July, 2016 at JNTUA CEA.

8. Attended One day workshop on "**21st Centuary Teaching Strategies**" held on 16th September, 2017 at JNTUA CEA.

9. Attended One day workshop on "**Awareness on IT/ITES Job Roles & Big Data Analytics**" held on 20th August, 2015 at JNTUA CEA.

10. Attended One day complimentary training/orientation on "**MATLAB, Simulink & Related Tool Boxes for Engineering Education**" held on 07th October, 2015 at JNTUC CEA.

11. Participated in the One day faculty development programme on "**Big Data Analytics**" held from 20-02-2017 to 22-02-2017 at JNTUA CEA.

12. Participated and Presented in the "**1st International Conference on Advanced Technologies in Engineering, Management and Sciences (ICATEMS'17)**" held on 16th and 17th November, Organized by Golden Valley Integrated Campus (GVIC) at Madanapalle.

13. Participated in the "**2 Days International Conference on Contemporary topics in Electrical & Electronics Engineering**" held from 27-02-2018 to 28-02-2018 organized by Department of Electrical & Electronics Engineering at Karpagam College of Engineering Coimbatore.

14. Pollai Asha, K. Nagabhushanam, R. Kiranmayi and M.Rathaiah "Multiple Renewable Sources Integrated Micro Grid with ANFIS Based Charge and Discharge Control of Battery for Optimal Power Sharing" Second International Conference Electrical, Electronics, Information and Communication Technologies (ICEEICT), 5-7 April 2023. Trichirappalli, IndiaDOI: 10.1109/ICEEICT56924.2023.10157007

15. M Venkata Lakshmi Narayana, K. Nagabhushanam, R. Kiranmayi and M.Rathaiah " A Novel Variable Step Incremental Conductance Maximum Power Point Tracking Algorithm Based on ANFIS Controller for Grid Photovoltaic Systems" Second International Conference Electrical, Electronics, Information and Communication Technologies (ICEEICT), 5-7 April 2023. Trichirappalli, India DOI: 10.1109/ICEEICT56924.2023.10157876

16. S. Roopa, K. Nagabhushanam, R. Kiranmayi & M. Rathaiah "Switched Capacitor Integrated Electric Vehicle for Energy Recovery During Regerative Mode Using Dual Sliding Mode-Proportional Integral Controller" Second International Conference on Electronics and Renewable Systems (ICEARS 2023) organized by St. Mother Theresa Engineering College, Tuticorin, Tamil Nadu, India. Held on 24 March 2023.DOI: 10.1109/ICEARS56392.2023.10085659

17. A. Parvathi, M. Rathaiah, R. Kiranmayi & K. Nagabhushanam "Design of PID Controller for Integrating Processes with Inverse Response" International Conference on Artificial Intelligence for Smart Community,Part of the Lecture Notes in Electrical Engineering book series (LNEE,volume 758) Springer. 14/11/2022DOI: https://doi.org/10.1007/978-981-16-2183-3_1

18. C. Venkatasuresh, M. Rathaiah, R. Kiranmayi & K. Nagabhushanam " Independent Controller Design for Non-minimum Phase Two Variable Process with Time Dealy" " International Conference on Artificial Intelligence for Smart Community, Part of the Lecture Notes in Electrical Engineering book series (LNEE,volume 758) Springer. 14/11/2022 DOI: https://doi.org/10.1007/978-981-16-2183-3_7

M.Tech/B.Tech

Subjects Courses taken/labs/Projects guided

1. Electrical circuits
2. Control Systems
3. Switchgear and protection
4. Electric Power Generating Systems
5. Transmission of Electric Power
6. Electric Power Distribution and Automation
7. Basic Electrical Energy
8. Optimal Control
9. Adaptive Control
10. Modern Control Theory
11. Process Dynamics and Control
12. Digital Control Systems
13. Digital Signal Processing
14. Signals and Systems

Achievements:

NPTEL: 1.Certificate published for "Advanced Linear Continuous Control Systems:

Applications with MATLAB Programming and Simulink.

Academic Projects Guided/Guiding: M.Tech-12, B.Tech-7

Administrative Works Supported:

- Performed Invigilation duties for different exams (End semester examinations (college & University),CET examinations, APPSC Examinations and UPSC Civil Service Examination).
- Assistance for university BOS
- Assistance for College BOS
- Supported in getting data for NBA , NAAC and NIRF
- Assisting for department administrative works