Curriculum Vitae

Name Dr. Yathisha L

Designation Dean, AIT, Tumakuru (Aug. 2023 to Till Date)

Dean-Student Affairs (June 2022 to Aug 2023, ATMECE, Mysuru)

Asst. Dean-Academics (Aug 2020 to June 2022, ATMECE, Mysuru)

Associate Professor (since Jan 2018, ATMECE, Mysuru)

Assistant Professor (July 2012 to Dec 2017, ATMCE, Mysuru)

Lecturer (Aug 2010 – Jun 2012, SJCE, Mysuru)

Research Experience: Aug 2011 to Till Date

Date of birth January 17, 1985 (Karnataka, India)

Present Address Department of Electronics and Communication Engineering

Akshaya Institute of Technology, Tumakuru-Koratagere- Road,

Tel: +91-9902238768, E-mail: dean@ait-tumkur.ac.in yathisha.171@gmail.com

Home Page: http://ait-tumkur.ac.in/dean-message/

Academic Qualifications:

- Ph. D. Faculty of Electrical and Electronics Engineering Sciences, Visvesvaraya Technological University (VTU), India, 2017.
- M. Tech. Industrial Electronics SJCE, Visvesvaraya Technological University (VTU), India,2010.
- AMIETE Electronics and Telecommunication Engineering IETE, New Delhi, India, 2007.

Fields of Interest

• Advanced Control Theory, Optimal Control, Hybrid Control and Non-Linear Systems.

Funding/Grants Received:

- **Principal Investigator:** Grants of Rs. 17,90,000/- (Seventeen Lakhs and Ninety Thousand Rupees Only) Received from Department of Science and Technology (DST), Government of India under NCSTC Division to organize science Fiesta in four districts of Karnataka (Coorge, Mandya, Mysore & Chamarajnagar). Duration: One Year (2021-22)
- Coordinator: Grants of Rs. 10,77,000/- (Ten Lakhs and Seventy-Seven Thousand Rupees Only) Received from All India Council for Technical Education (AICTE) under the MODROB Scheme for the enhancement of Microwave and Communication Laboratory. Duration: Three Years (2021-24)
- College Coordinator: Grant of Up to Rs. 2,00,00000/- (Two Crores) received from Karnataka Innovation & Technological Society (KITS) for setting up of District Innovation Hub (DIH) Lab to carry out the Innovative Projects by Students. Duration: Five Years (2022-27).
- **Principal Investigator: AIT** has been recognized by NSDC as a Training Center for Skill Development to provide training in Green Hydrogen.

Academic Achievements:

- Bharat Ratna Dr. Abdul Kalam Gold Medal Award from Global Economic Progress and Research Association (GEPRA), New Delhi.
- Shisyaru Mechhidha Guru Award from Negilayogi Samaja Seva Trust and Vidyavardhaka Sangha, Mysuru.
- Resource person for "LATEX" workshop organized by SJCE, MIT, IETE and ATMECE Mysuru.
- Resource person for "MATLAB & its applications" workshop organized by IETE Mysuru.
- Honorary Treasurer from June 2014- May 2016 IN IETE Mysuru Centre, Mysuru.
- Executive Committee member of IETE Mysuru Centre from June 2018 to till date.



- Jury member for state-level project Exhibition held at VVCE, Mysuru.
- Organizing Committee Member of ICRTST 2022
- Resource Person for THE 3-Days FDP on "Importance of NAAC Accreditation in Higher Education Institutions" organized by ATME College of Engineering, Mysore.

Minor Project/Workshop Funds:

- > Brought the fund from VGST (Rs. 30,000/-) for the UG project "Automation of Shopping Cart to Ease Queue in Malls by Using RFID".
- > Brought the fund from ministry of communication & IT, Govt. of India (Rs. 12,000/-) for organizing ESDM workshop.
- ➤ Brought the fund from KCST (Rs. 6,000/-) for the UG Project "Rider Safety Using Embedded Systems".
- > IEEE Control system society has granted Travel & Accommodation Grant support for presenting research paper in 3rd Indian Control Conference 2017, held at IIT Guwahati.
- > Karnataka State Council for Science and Technology has awarded best project of the year 2017-18 for the project entitled "Rider Safety Using Embedded Systems", held at BIT, Davangere.

Courses taught: Control Systems, Signals & Systems, VHDL, Network Analysis, Power Electronics, Antennas & Wave Propagation, Basic Electronics, Linear Integrated Circuits and Analog Communication.

Member of editorial board/Reviewer

- Editorial Board member, Journal of Electrical Engineering, Scientific Research Association.
- Reviewer of International Peer Reviewed Journals.
- Reviewer of IEEE Conferences.

Research Details:

- **Research Guideship University:** Visvesvaraya Technological University (VTU), Belagavi.
- > Research Guide ID: VTU07195911.
- Research Guiding: 02

Candidate Name: Nandeesha S P

Research Topic: COORDINATED & HYBRID CONTROL TECHNIQUES AS APPLIED TO UNIFIED POWER FLOW CONTROLLER FOR POWER SYSTEM DYNAMICS STABILITY AND CONTROL

Status: Comprehensive Viva Voce and Open Seminar-I Completed

Candidate Name: Girish M

Research Topic: Real Time Monitoring of ICT Enabled Buildings to Ensure Effective Utilization of Resource Using LabVIEW.

Status: Course work in progress.

Publications Summary:

Sl. No.	Journals/Conferences	Numbers
1	Springer Journals Indexed in Scopus	01
2	Scopus Indexed Journals	06
3	Springer Book Chapter Indexed in Scopus	01
4	Conference Proceedings Indexed in Scopus	06
5	UGC Approved Journals	05
6	Peer Reviewed Journals	16
7	International Conference Proceedings	04
8	National Conference Proceedings	03
TOTAL PUBLICATIONS		42

Publications Details:

SPRINGER JOURNALS (SCOPUS INDEXED):

1. **Yathisha** L and S Patil Kulkarni, "LQR and LQG Based Optimal Switching Techniques for PSS and UPFC in Power Systems", Control Theory and Technology, Springer, Vol. 16, Issue1, pp. 25-37, Feb 2018, ISSN: 20956983. (Q2 Indexed).

SCOPUS INDEXED JOURNALS:

- 1. Nandeesha S P, **Yathiosha L**, Suhas G K and Kumara K, "Coordinated and Uncoordinated Control Techniques for PSS and UPFC to Enhance Power System Stability and Control", Journal of Information Systems and Engineering, Vol. 10, Issue 2, 2025, ISSN: 2468-4376. (Q4 Indexed).
- 2. Shashidhar S Gokhale, **Yathisha L** and S Patil Kulkarni, "Performance improvement of air path dynamics in diesel engines using LQR/LQG optimal & switching control techniques", International Journal of Recent Technology & Engineering, Vol. 8, Issue 2s11, ISSN: 2277-3878, pp. 149-156, Sep 2019. (Q4 Indexed).
- 3. Shashidhar S Gokhale, **Yathisha L** and S Patil Kulkarni, "LQR Based Optimal Control Techniques As Applied to Air Path of Diesel Engines", International Journal of Recent Technology and Engineering, Vol. 8, Issue 1C, ISSN: 2277-3878, pp. 149-156, May 2019. (Q4 Indexed).
- 4. Sai Shankar, K T Veeramanju and **Yathisha L**, "Multi-Stage Switching Control of Multi-LQR'S for STATCOM Operating Over Wide Range of Operating Conditions in Power System", International Journal of Recent Technology and Engineering, Vol. 7, Issue 6s, ISSN: 2277-3878, pp. 371-379, Mar 2019. (Q4 Indexed).
- 5. **Yathisha** L and S Patil Kulkarni, "Optimal Switched Feedback Controller Design For the Simultaneous Coordinated Design of UPFC & PSS in power system", Journal of Electrical Engineering, University of Polytechnia, Romania, Vol.16, Issue 4, ISSN: 1582-4594 pp. 408-414, Dec 2016. (Q4 Indexed).
- 6. **Yathisha** L and S Patil Kulkarni, "Optimal Switching Strategy Method Performance in the Design of UPFC Controllers", International Journal of Control Theory & Applications, International Science Press, Vol. 9, Issue 37 ISSN: 0974-5572, pp-909-921, Dec 2016. (Q4 Indexed).

SPRINGER BOOK CHAPTER:

1. **Yathisha** L and S Patil Kulkarni, "Optimum LQR Switching Approach for the Improvement of STATCOM Performance", Springer LNEE, Volume 150, August 2013, pp. 259-266. DOI: 10.1007/978-1-4614-3363-7_28.

IEEE & INTERNATIONAL CONFERENCE PROCEEDINGS: INDEXED IN SCOPUS:

- 1. Nagendra Kumar M, Arpitha H B and **Yathisha L**, "Noise Removal Technique for Restoration of Medical Images", 15th International Conference on Advances in Computing, Control and Telecommunication Technologies, ACT 2024, June 2024, pp. 6494-6504.
- 2. **Yathisha L** and Nandeesha S P, "Design of Optimal Controllers for UPFC with wide Range of Operating Conditions in Power System", 14th International Conference on Advances in Computing, Control and Telecommunication Technologies, ACT 2023, June 2023, pp. 1121-1128.
- 3. **Yathisha** L and S Patil Kulkarni, "Optimal switching control strategy for UPFC for wide range of operating conditions power system", 3rd Indian Control Conference (ICC 2017), IEEE Conference held at IIT, Guwahati on 4th to 7th Jan 2017. DOI: 10.1109/INDIANCC.2017.7846479.
- 4. **Yathisha L** and S Patil Kulkarni, "Application and comparison of switching control algorithms for power system stabilizer" IEEE International Conference on Industrial Instrumentation and Control (ICIC), IEEE Proceedings, May 2015, Pune, pp. 1300-1305.DOI: 10.1109/IIC.2015.7150949.
- 5. Manjunath K, Juslin F and **Yathisha L**, "Application and Comparison Of Optimal & Hybrid Control Systems for Aircraft Applications", 1st IEEE International Conference on Power Energy, Environment and Intelligent Control (PEEIC-2018), 13th -14th April 2018, Noida, India.
- 6. Girish M, **Yathisha** L and Harsitha N, "Multi LQR's Switching Control for UPFC in Power System", 3rd IEEE International Conference for Convergence in Technology, 6th -8th April 2018, Pune, India.

UGC APPROVED JOURNALS:

- 1. Nandeesha S P and **Yathisha L**, "State Feedback LQR and Pole Placement Switching Control for the Power System Stabilizer", GIS Jounal, Vol. 11, Issue 11, 2024, ISSN: 1869-9391, PP. 181-187.
- 2. Sai Shankar and **Yathisha L**, "Optimization Control Techniques for Aircraft Yaw Control Lateral Dynamics", Samriddhi: A Journal of Physical Sciences, Engineering & Technology, Vol. 15, Issue 3, Nov. 2023, ISSN: 2279-7111, pp. 1-6.
- 3. Sai Shankar, **Yathisha** L and K T Veeramanju, "Design of Optimal Control Techniques for STATCOM Control Inputs in Power System", International Journal of Research in Advent Technology, Vol.7, Issue 6, June 2019, ISSN: 2321-9637, pp. 177-183.
- 4. Shashidhar S Gokhale, S Patil Kulkarni and **Yathisha L**"Optimal and Non-Optimal Based Feedback Switching Control Techniques for the Turbocharged Diesel Engines", International Journal of Research in Advent Technology, Vol.7, Issue 4, April 2019, ISSN: 2321-9637, pp. 608-615.
- 5. Shashidhar S Gokhale, **Yathisha L** and S Patil Kulkarni, "Optimal Feedback Switching Control Design for the Turbocharged Diesel Engine with an EGR System", Vol. 6, Issue 10, Oct-2018, ISSN: 2347-2693, pp. 880-894.

PEER-REVIEWED INTERNATIONAL JOURNALS:

- 1. Supreeth H S G and **Yathisha L**, "Android Application for Temperature Monitoring Using IoT", International Journal of Advances in Engineering and Management (IJAEM), Volume 4, Issue 4, Apr 2022, pp: 1155-1159, ISSN: 2395-5252, DOI:: 10.35629/5252-040411551159.
- 2. Pavithra A C, **Yathisha L** and Archana N V, "Optimal Switching Techniques for Aircraft Lateral Dynamics", International Journal on Instrumentation and Control Engineering, Vol. 6, Issue 4, Oct 2018, pp. 27-34.
- 3. Shashidhar S Gokhale, **Yathisha L** and S Patil Kulkarni, "Application and Comparison of Optimal LQR Control Techniques for Engine Modeling", International Journal on Instrumentation and Control Engineering, Vol. 6, Issue 3, May 2018, pp. 36-42.
- 4. Sai Shankar, K T Veeramanju and **Yathisha L**, "Design and Comparison of Optimal Controllers for Reactive Power Compensation using STATCOM Facts Device in Power System", International Journal on Instrumentation and Control Engineering, Vol. 6, Issue 2, May 2018, pp. 1-9.
- 5. Kourosh Davoodi, **Yathisha** L and S Patil Kulkarni, "Performance Analysis of Switching Between Bryson, Boudarel & Multistage LQR's for Power System with UPFC at Different Load Conditions", International Journal of Power System Engineering, Vol. 5, Issue 4, April 2018, pp. 1-14.
- 6. Girish M, **Yathisha** L and Harsitha N, "Switching Control of Multi LQR's for UPFC in Power System", Asian Journal of Convergence in Technology, Vol. 4, Issue 1, Mar 2018, pp. 5-11.
- 7. **Yathisha** L and S Patil Kulkarni, "Optimal Feed-Back Switching Control for the UPFC based Damping Controllers, International Journal on Control System and Instrumentation, ACEEE, Vol. 3, issue 2, ISSN:2158-0006, pp. 49-53, 2012.
- 8. **Yathisha** L, "Automated Smart Cart for Retail Marts", International Research Journal of Engineering and Technology (IRJET), Vol. 3, Issue 6, June 2016, ISSN: 2395 -0056, pp. 1327-1330.
- 9. Sai Shankar and **Yathisha L**, "Switching Control Algorithm for the Power System Stabilizer", Journal of Mechatronics, American Scientific Publisher, Vol. 3, Issue 4, 2015, pp. 1-4.
- 10. Sai Shankar, K T Veeramanju and **Yathisha L**, "Application and Comparison of Optimum Linear Quadratic Regulator Controllers for the Improvement of Static Synchronous Compensator Performance" Journal of Mechatronics, American Scientific Publisher, Volume 3, Number 2, September 2015, pp. 1-4.
- 11. **Yathisha L**, "Automation of Shopping Cart To Ease Queue In Malls By Using RFID" International Research Journal of Engineering and Technology (IRJET), Volume: 02, Issue: 03, June-2015, ISSN: 2395-0056, pp. 1435-1441.
- 12. **Yathisha L**, "Eco-Friendly Car Using Solar and Electrical Energy" International Research Journal of Engineering and Technology (IRJET), Volume: 02, Issue: 03, June-2015, ISSN: 2395-0056, pp. 2162-2167.
- 13. **Yathisha** L and Shashidhar S Gokhale, "Relation Between Two Standard Switching Algorithms and Optimum LQR Switching Approach for the Improvement of STATCOM Performance" Journal of Mechatronics, Volume 3, Number 1, March 2015, pp. 58-61.
- 14. **Yathisha** L and A C Pavithra, "Novel Optimal LQR Switching Control Method for the Speed Control of DC Motor", International Journal of Advances in Engineering and Emerging Technology (IJAEET), Vol. 5, No. 6, August 2014, ISSN 2321-452X, Emerging Research Library, pp 248-257.

- 15. S R Bhagyashree and **Yathisha L**, "Design of UPS using PSOC Technology" International Journal of Electrical, Electronics and Computer Systems (IJEECS), Vol. 2, Issue 2,ISSN: 2348 117X, Jan-2014, PP. 1-5.
- 16. **Yathisha L**, "Prevention of Wild Animals entering into the Agricultural field", International Journal of Engineering, Basic sciences, Management & Social studies Volume 1, Issue 1, May 2017, pp. 639-647.

INTERNATIONAL CONFERENCES:

- 1. **Yathisha** L and S Patil Kulkarni, "Optimal Feed-Back Switching Control for the UPFC based Damping Controllers" Proceedings of the Second International Joint Conference on Advances in Engineering Technology AET 2011, Noida, pp. 145-149. DOI: 02.AEE.2011.02.79.
- 2. **Yathisha** L and S Patil Kulkarni, "Hybrid Modeling and Switching Algorithm for Power System with FACTS Based Controllers," Proceedings of International Conference on System Dynamics and Control, Manipal, pp. 367-372, 2010.
- 3. Shashidhar S Gokhale, Sudashan S Patil Kulkarni and **Yathisha L**, "LQR Based Optimal Control Techniques As Applied To Air Path of Diesel Engines", Second International Conference on Emerging Trends in Science and Technologies for Engineering Systems, ICETSE 2019, held at SJCIT, Chickballapur, 17th & 18th May 2019.
- 4. Sai Shankar, K T Veeramanju and **Yathisha L**, "Multi-Stage Switching Control of Multi- LQR'S for STATCOM Operating Over Wide Range of Operating Conditions in Power System", International Conference on Advances in Signal Processing, Power, Embedded, Soft Computing, Communication and Control Systems (ICSPECS-2019), held at G.Pulla Reddy Engineering College (Autonomous), 11th &12th Jan 2019.

NATIONAL CONFERENCES:

- 1. **Yathisha** L& Shashidhar S Gokhale, "A Novel Method for the Design of LQR Controllers in speed Control of DC Motor" Proceedings of IX Control Instrumentation System Conference 2012 (CISCON) held on 16-17, November 2012 at the Manipal Institute of Technology, Manipal. pp 62-65.
- 2. **Yathisha L**, Shashidhar S Gokhale and A C Pavithra, "Optimal Switching Control for the Speed Control of DC Motor" First National Conference on Intelligent Computing in Instrumentation and Communication (NCICIC-2013), Mar -2013, Chennai, pp. 9.
- 3. **Yathisha L**, "Application and Comparison of Optimal LQR Controllers for UPFC Operating Over Wide Range of Operating Conditions in Power System", Proceedings of National Conference on Communication and Data Science (NCCDS-2019), 26th April 2019, held at GSSSIETW, Mysuru

Accreditation Experience:

- **♣** Deputy Coordinator of IQAC
- **Institute Level NAAC Coordinator**
- Institute Level NBA Coordinator
- **↓** Institute Level Coordinator for QS I-Gauge

Curriculum Vitae

Strength:

- 1. One of the Youngest Doctorate's and Active in research publications with colleagues.
- 2. I am extreme strong in Leadership Skills.
- 3. I'm very collaborative and have always preferred to work in groups.
- 4. I have extremely strong writing skills and never miss a Deadline.

Weakness:

- 1. Take on too much responsibility.
- 2. I am quite honest sometime which makes other feel bit uncomfortable about it.
- 3. Helping others is good but sometimes it becomes my weakness.

"The Object of education is to prepare the young to educate themselves throughout their lives"

-Robert M. Hutchins

"The Science of today is the technology of tomorrow"

-Edward Teller

"Technology is just a tool in terms of getting the kids working together & motivating them, **the teachers**is the most important"

-Bill Gates

(Dr. YATHISHA L)