

# National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

## Curriculum Vitae



Brief Profile: 1-2 paragraphs (not exceeding 500 words)

Dr. D. Ezhilarasi is the Associate Professor at the Department of Instrumentation and Control Engineering, National Institute of Technology, Tiruchirappalli. Prior to joining the Institute, she was with College of Engineering, Anna University-Guindy Campus as Assistant Professor. She got her Ph.D. degree from NIT Trichy specializing on Multirate output feedback control for vibration control of Smart Structures. Her Research interest span the fields of Energy Harvesting using Piezoelectric, Dynamic Modeling and Control of Exoskeletons, Robotics, System Identification, design of Higher order Sliding Mode Control and adaptive control techniques for different engineering applications. She has completed three major research projects for NPOL and DEBEL, DRDO, and two R&D projects are in progress. She has guided three Doctoral Thesis and currently guiding 5 scholars and published 34 international journals. She was Associate Dean (Student welfare -2012-2013) and Associate Dean (International Relations) during 2019-2021 at NIT Trichy. Dr. Ezhilarasi is a senior member of IEEE and ISA, and Life member of SSI and ISSS, India.

1. Name: Dr. D. Ezhilarasi
2. Designation: Associate Professor
3. Office Address: Department of ICE
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5. Email (Primary): ezhil@nitt.edu                      Email (Secondary) ezhilnitt@gmail.com
6. Field(s) of Specialization: Instrumentation and Control
7. Employment Profile

Job Title	Employer	From	To
Research Associate	EEE Dept, NIT Trichy	2003	2005
Lecturer	SASTRA University	2006	2007
Lecturer	Anna University, Guindy	2007	2008
Assistant Professor	Dept. of ICE, NIT Trichy	2008	Till date

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### 8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	NIT Trichy	2009		Vibration Control
MTech	NIT Trichy	2003	First	Process Control & Instrumentation
B. E	Madras University	2000	First	Electrical & Electronics

### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Secretary	Convocation 2020	Oct 2020	Nov 2020
Secretary	Convocation 2019	June 2019	Till Date
Member	Smart India Heckathon 2019	June 2019	July 2019
Member	Institute Day 2019	April 2019	April 2019
Member	NBA Committee Visit	March 2019	October 2019
Associate Dean	International Relations NITT	Dec 2018	March 2021
Faculty In Charge	Spider Club NITT	Dec 2018	July 2021
Member	Convocation 2018	June 2018	August 2018
Associate Dean	Students Welfare/ NITT	Oct 2012	June 2013
HAC Member	Students Welfare/ NITT	Oct 2012	June 2013
Warden	OPAL Hostel /NITT	July 2012	June 2013
Faculty In charge-	Test & Optimization lab Siemens Center of Excellence - NITT	May 2018	Sep. 2021
Member	Horticulture Committee, NITT	May 2018	Dec 2020
Member	Transport committee, NITT	May 2018	Dec 2020
Lab In charge	Embedded Systems Lab, NITT	Aug 2014	Sep 2021
Member	DPEC (PG-PCI), NITT	July 2019	May 2020
B.Tech Project Co Ordinator	NITT	Jan 2019	May 2019
Class Committee Chairperson	NITT	July 2018	Dec. 2020
In Charge	ICE Department MIS, NITT	May 2018	May 2019
Committee member	MS/Ph.D. Admission	April 2018	Dec. 2019

### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Resource Person	FDP-AICTE Sponsored Online Two-Week FDP, EEE, CEG, Anna University	2021	2021
PhD Viva Voce Examiner	Satyabhama University	2021	2021

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Interview Panel Member	JRF Interview Selection Process, DEBEL DRDO Bangalore	2021	2021
Indian Examiner	PhD Thesis Evaluation, Anna University	2021	2021
Examiner	MS by Research Thesis Evaluation, CEG, Anna University	2020	2020
Resource Person	Open Webinar in YouTube, Mohamed Sathak AJ College of Engg.	2020	2020
Keynote Speaker	International Conference on AI & ML Applications in Smart Buildings, VIT, Chennai	2020	2020
Indian Examiner	PhD Thesis Evaluation, CUSAT Kerala	2019	2019
Indian Examiner	PhD Thesis Evaluation, Anna University	2019	2019

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2010	Best Paper Award	34th National Systems Conference NSC-2010
	Sun Certified JAVA Programmer	

### 12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2010	Mentoring of Engineering Teachers by INAE fellows under Prof. B. Bandyopadhyay, Systems and Science, IITB.	INAE, Govt. of India	May/2010	June/2010

### 13. Details of Academic Work

#### (i) Curriculum Development

Developed the syllabus for Interfacing Signal Processing Lab and introduced 10 new experiments.

#### (ii) Courses taught at Postgraduate and Undergraduate levels

Electrical and Electronic Measurements

Industrial Instrumentation Practices

System Identification and Adaptive Control

Logic and Distributed Control System

Sensors and Transducers

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Industrial Instrumentation-I

Industrial Instrumentation-II

Digital Electronics

Digital Control System

Smart Materials and Structures

Branch Specific Course

(iii) Projects guided at Postgraduate level

S.No.	Title	Student Name	Year
1	Machine learning based approach to find out the fault detection of railways tracks and its components  Precision Farming and Automation in green house	Manoj Kumar Shaw	2021-22
2	Object detection using deep learning for autonomous cars  Design and Implementation of Backstepping controller for Twin Rotor MIMO System	Md. Imtiyaz Uddin	2021-22
3	Performance and bandwidth improvement in Vibration energy harvesting system  Performance and Bandwidth Improvement in Vibration Energy Harvesting System	Shailesh Jaiswal	2020-21
4	Design and Implementation of Robust Controller for 2 DOF Helicopter System	Satendra Sharma	2019-20
5	Automotive Data Time Triggered Framework Development and Incorporation of CAFFE and YOLO(Deep Learning Algorithm) for Advanced Driving Assistance System  Application Development for Advanced Driving Assistance Systems	Muthu Krishnan C	2019-20
6	Maximum Power Extraction Circuit Design for Piezo Electric Energy Harvesting  Energy Harvesting from Broad Band Random Vibrations Using Multi-Modal Piezo-Electric Energy Harvesters	Rajagopal J	2018-19
7	Design of Sliding Mode Controller with	Aditi Yadav	2016-17

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	Ellipsoidal Sliding Surface for Train Trajectory Tracking in Automatic Train Operation  Distributed Adaptive Perimeter Control for Large Scale Road Networks		
8	Multi resonant Broadband energy harvester using Piezoelectric Material  Multi-Resonant broadband energy harvester using piezoelectric material	K. Arun Kumar	2016-17
9	Longitudinal Train Controller for Automatic Train Operation  Design Of Sliding Mode Controller for Train Trajectory Tracking in Automatic Train Operation	Jijo Benni	2015-16
10	State Estimation Using Nonlinear Kalman Filtering Technique for Train Navigation System  Multisensor Data Fusion for Train Navigation System	Tithi Bansal	2015-16
11	Optimization of Piezoelectric energy harvester  Temperature Measurement and Autocalibration of the High-Density Winding Coils of Electromagnets	Ronish Simon	2014-15
12	Energy Based modeling and control of train coupler  Detection of Longitudinal Cracks in Beam Structures using Electromechanical Impedance and Frequency Analysis	Laji C A	2014-15
13	Passive Vibration Control of a Beam using Piezoelectric Transducer  Model Reference Adaptive Control for Longitudinal Train Dynamics	Rathiararchana V	2013-14
14	Energy Harvesting from the Mechanical Vibrations of a Bicycle  Acoustic Energy Harvesting Using Piezoelectric Material	Aby Thomas	2013-14
15	Monitoring and Control of Agricultural Parameters in a Greenhouse through Internet GSM Based RF Energy Harvesting	Abhfeeth K.A	2012-13
16	Design and Implementation of Multirate Output Feedback Sliding mode control for Rotary	Kannad Hardik Versibhai	2012-13

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	Motion Servoplant  Design and Implementation of Sliding Mode Control with Nonlinear Sliding surface for Rotary Motion Servo Plant		
17	Design of Higher order sliding mode Control for Smart structures with Uncertainty  Design of Sliding Mode Observers for Health Monitoring of Smart Structure	Srikanth Reddy.K	2011-12
18	Design of Energy Harvesting Module Using Piezoelectric Material for Wireless Network  Wireless Monitoring and Control of Agricultural Parameters in a Green House	Akshay Chaudhari	2011-12
19	Energy Harvesting Using Piezoelectric Material	Pavan Sathya kumar Pilli	2010-11
20	Design and Implementation of Sliding Mode control for an Inverted Pendulum	K.B. Rajendra Prasad	2010-11
21	Sensing and Control of Temperature through Wireless Network	M. Semal Sekhar	2009-10
22	Design of Sliding mode Control for Microsystem (CEG, Guindy)	N. Angayarkanni	2009-10
23	Design of Multirate Output feedback Controller for Liquid Level System(CEG, Guindy)	M. Shanmugapriya	2008-09
24	Design of Intelligent Controllers for Piezoelectric Smart Beam(CEG, Guindy)	R. Shanthi	2008-09
25	Design and Implementation of Adaptive controllers for Vibration control of Piezo Actuated Cantilever Beam(CEG, Guindy)	J. Rajalakshmi	2008-09

(iv) Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Design and development of low-cost multifunctional lower limb exoskeleton system for motion assistance to paraplegics	SERB-POWER, DST, GoI	2021	2024	Ongoing
Design of Sliding Mode Controller for Biped Walking	CARS, DEBEL, DRDO	2020	2021	Completed
Development of an Integrated Health Monitoring System for Large Engineering Structures	Impacting Research Innovation and	2019	2022	Ongoing

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	Technology (IMPRINT-2)			
Design and Development of piezoelectric energy harvesting system integrated with electric circuit and storage	CARS, NPOL, Kochin, DRDO	2018	2020	Completed
Energy harvesting using Piezoelectric for self-powered wireless sensor network based precision agriculture	DST- SERC FAST Track	2010	2013	Completed

15. Number of Ph.Ds. guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
M. Ganesan	Modelling and Control of Longitudinal Train Dynamics using Sliding Mode Control with Model Reference Adaptation	Supervisor	2018
Minu A Pillai	Analysis And Design of Acoustic Energy Harvesters Using Duct Resonators and Piezoelectric Unimorphs	Supervisor	2018
Rami Reddy	Performance enhancement in Piezoelectric based vibrational Energy harvester using structural Tailoring and hybrid concept	Supervisor	2016

MS By Research

Name of the MS Scholar	Title of the Thesis	Role(Supervisor / Co-Supervisor)	Year
Bhabani Sankar Padhy	Detection and Experimental Evaluation of Cracks in a Cantilever Beam using Strain Energy Analysis	Supervisor	2014-17
Harihara Krishnan	Design and Development of Micro Electrothermal Actuators and Energy harvesting Using Pyroelectricity (Completed)	Supervisor	2010-13

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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

<b>Date(s)</b>	<b>Title of Activity</b>	<b>Level of Event (International / National/ Local)</b>	<b>Role (Speaker/ Chairperson , Presenter)</b>	<b>Organized by</b>	<b>Venue</b>
Jan. 21-25, 2013.	Variable structure and sliding mode control concept, theory and applications	International	Participant	IIT Bombay, India	IITB
Mar. 21-23, 2013	Finite Element Methods	National	Participant	Civil Engg. Department	NITT
Jan. 12-14, 2012	12 <sup>th</sup> IEEE International workshop on Variable Structure Systems	International	Participant	IITB, Mumbai, India	IITB
Jan. 4-7, 2012	VI <sup>th</sup> international ISSS Conference on Smart Materials, Structures and Systems (ISSS2012)	International	Participant	IISC Bangalore, India	IISC
Dec. 13-15, 2010	6 <sup>th</sup> International conference on Vibration Engineering and Technology of Meachinery, VETOMAC-VI	International	Participant	IIT Delhi, India	IITD
July 28 <sup>th</sup> 2006	International Conference on Control, Communication and Power Engineering	International	Participant	ACEEE	Chennai
July 26-30, 2010	MEMS and its CAD tools	National	Participant	AICTE-MHRD-FDP	NITT



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				program	
Dec. 17 <sup>th</sup> 2009	Polynomial Global Optimization and Constant Propagation Techniques	National	Participant	NITT Prof. P.S. Nataraj, IITB	NITT
Dec. 25-31 2009	Estimation and control: advanced theory and applications Optimization Algorithms for Manufacturing Applications	National	Participant	EEE Deptt. IIT, Kharagpur	IITKH
May 20-26, 2009	Embedded system design Using Micro- Controllers	National	Participant	Deptt. of Instrumentation, IISC, Bangalore, Karnataka	IISC
Nov. 24-30, 2008	Solid State Drives	National	Participant	CEG campus, Anna University Chennai	Chennai
Oct. 16-18, 2008	Control Theory & its application to practical Problems	National	Participant	Dept. of EEE, AU, Chennai	Chennai
June 9-10, 2006	Optimization Algorithms for Manufacturing Applications	National	Participant	TEQIP, PE Deptt.	NITT
Aug. 16-20, 2004	Process Optimization, Data Driven Modelling and Advanced Process Control	National	Participant	SERC School, IIT Bombay	IITB
Dec. 8-10, 2006	International Congress on “Computational	International	Participant	IIT Guwahati, India	IITG

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	Mechanics and Simulation (ICCMS-06)”				
Aug. 8- 9, 2003	National conference on Process Identification, control & Diagnosis NCPICD-2003	National	Participant	Instrumentation Engineering and Technology, Annamalai Univ.	

### 17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
International Conference on Instrumentation and Control Engineering (ICECON - 2019)	International	Dec 19-21, 2019	Treasurer	Dept of ICE, NITT
One week Faculty Development Program on <b>Smart materials and systems</b>	National	June 11-15, 2012	Coordinator	Dept of ICE, NITT
TEQIP Sponsored One Week Workshop on <b>MEMS, its CAD Tools and Smart Structures</b>	National	Jan 5-9, 2015	Coordinator	Dept of ICE, NITT

One week Faculty Development Program on organized on **Smart materials and systems** sponsored by NIT, Trichy from June 11-15, 2012

### 18. Invited Talks delivered

Topic	Date	Inviting Organization
Sliding mode control	29 <sup>th</sup> April 2016	VIT, Vellore

### 19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life member	Smart materials, Structures and Systems (ISSS)	LM-171
Life member	System Society of India (SSI)	LM -31627

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20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Vol. (No.)	Page No.	Year	IF of the Journal
<b>Ezhilarasi D,</b> Anjali S Nair	Modeling and Evaluation of Adaptive Super Twisting Sliding Mode Control in Lower Extremity Exoskeleton	International Journal of Precision Engineering and Manufacturing – Green Technology	8	901-915	2021	
Anjali S. Nair, <b>D Ezhilarasi</b>	Performance Analysis of Super Twisting Sliding Mode Controller by ADAMS–MATLAB Co-simulation in Lower Extremity Exoskeleton	International Journal of Precision Engineering and Manufacturing-Green Technology	7	743-754	2020	
Minu A. Pillai, D. D. Ebenezer, and <b>Ezhilarasi D</b>	Transfer matrix analysis of a duct with gradually varying arbitrary cross-sectional area	The Journal of the Acoustical Society of America	146	4435	2019	
Ganesan Muniandi, <b>Ezhilarasi D</b>	Composite model reference adaptive sliding mode controller for automatic train operation	IET Control Theory and Applications	13	3536-2435	2019	
Ganesan Muniandi, <b>Ezhilarasi D</b>	Train distance and speed estimation using multi sensor data fusion	IET Radar, Sonar & Navigation	13(4)	664-671	2018	
Minu A. Pillai, D. D. Ebenezer and <b>Ezhilarasi D</b>	Design and optimization of piezoelectric unimorph beams with distributed excitation	The Journal of the Acoustical Society of America	143(5)	2685-2696	2018	
Minu A. Pillai, D. D. Ebenezer	Erratum: Analytical model of mechanically	J. Acoust.Soc. Am.	142(4)	1871-1873	2017	

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and <b>Ezhilarasi D</b>	Excited Piezoelectric Unimorph Beams					
Minu A. Pillai, D. D. Ebenezer and <b>Ezhilarasi D</b>	Analytical model of mechanically excited piezoelectric unimorph beams	The Journal of the Acoustical Society of America	142 (2)	718- 727	2017	
Ganesan M , <b>Ezhilarasi D</b> , Jijo Benni,	Second-order sliding mode controller with model reference adaptation for automatic train operation	Vehicle System Dynamics			2017	
Ganesan M , <b>Ezhilarasi D</b> , Jijo Benni	Hybrid model reference adaptive second order sliding mode controller for automatic train operation	IET Control Theory and Applications	11(8)	1222- 1233	2017	
Minu A Pillai, <b>Ezhilarasi D</b>	Improved Acoustic Energy Harvester using Tapered neck Helmholtz Resonator and Piezoelectric Cantilever undergoing concurrent bending and twisting	Procedia Engineering (ELSEVIER)	144	674- 681	2016	
A Rami reddy, Umaphathy M, <b>D. Ezhilarasi</b> , Uma Gandhi	Piezoelectric energy harvester with shape memory alloy actuator using solar energy	IEEE Transactions on Sustainable Energy	6(4,)	1409- 1415	Oct 2015	
A Rami reddy, Umaphathy M, <b>D. Ezhilarasi</b> , Uma Gandhi	Cantilever Beam with Trapezoidal Cavity for Improved Energy Harvesting	Journal of International Journal of Precision Engineering and Manufacturing	16(8)	1875- 1881	2015	
A Rami reddy, Umaphathy M, <b>D. Ezhilarasi</b> , Uma Gandhi	Modelling and Experimental investigations on stepped beam with cavity for energy harvesting	Journal of Smart Structures and Systems	16(4)		2015	
A Rami reddy, Umaphathy M, <b>D. Ezhilarasi</b> , Uma Gandhi	Improved energy harvesting from vibration by introducing cavity in a cantilever beam	Journal of Vibration and Control		1-10	2014	
K. Dhanalakshmi, M. Umaphathy and <b>D Ezhilarasi</b>	Sliding Mode Control of SMA Actuated Structures for	International Journal of Modelling,	23(3)		2015	

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	Vibration Control	Identification and Control				
Minu A Pillai, <b>D. Ezhilarasi</b>	A review of Acoustic Energy Harvesting	Journal of Precision Engineering and Manufacturing	15 (5)	949-965	May 2014	
S. Harihara Krishnan, <b>D. Ezhilarasi</b> , G. Uma, M. Umapathy	Pyroelectric based solar and wind energy harvesting system	IEEE Transactions on Sustainable Energy	5 (1)	73-81	Jan 2014	
K. Dhanalakshmi, M. Umapathy, <b>D. Ezhilarasi</b>	Shape memory alloy actuated structural control with discrete time sliding mode control using multirate output feedback	Journal of Vibration and Control			2014	
Abhfeeth K. A., <b>D. Ezhilarasi</b>	Monitoring and Control of Agriculture Parameters in a Greenhouse through Internet	Sensors & Transducers,	150(3)	106-112	2013	
K. Dhanalakshmi, M. Umapathy, <b>D. Ezhilarasi</b> and B. Bandyopadhyay	Design and implementation of fast output sampling feedback control for shape memory alloy actuated structures	Smart Structures and Systems	8 (4)		2011	
J. Arunshankar, M. Umapathy, <b>D. Ezhilarasi</b>	Sliding mode controller with multisensory data fusion for piezoactuated structure	Defence Science Journal	60 (4)	346-352	2011	
J. Arunshankar, M. Umapathy, B. Bandyopadhyay and <b>D. Ezhilarasi</b>	Multirate feedback control of piezo actuated structures with multisensor data fusion	International Journal of Image and Data Fusion (Taylor & Francis)		1-16	2011	
<b>D. Ezhilarasi</b> , M. Umapathy, B. Bandyopadhyay	Design and Experimental Evaluation of Simultaneous Fast Output Feedback control for Piezoelectric Actuated Beam structures	International Journal of Automation and Control	4 (1)	42-64	2010	
K. Dhanalakshmi, M. Umapathy, <b>D. Ezhilarasi</b>	Experimental evaluation of periodic output feedback	International Journal of Advanced	2 (5)	330-341	2010	

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and M. Marimuthu	control for SMA actuated structures	Mechatronic Systems				
S.Neduncheliyan, M.Umapathy, <b>D.Ezhilarasi</b>	Simultaneous Periodic Output Feedback Control for Piezoelectric Actuated Structures Using Interval Methods	International Journal on Smart Sensing and Intelligent Systems	2(3)		2009	
<b>D.Ezhilarasi</b> , M. Umapathy, B.Bandyopadhyay	Design and experimental evaluation of Simultaneous periodic output feedback control for structural vibration suppression using PZT patches	Journal of Structural control and health monitoring Wiley Interscience	16	335-349	2009	
L.R. Karlmarx, M. Umapathy, <b>D. Ezhilarasi</b>	Embedded output feedback controllers for piezoelectric actuated structures	World Journal of Modeling and Simulation	5 (2)	113-119	2009	
L. R. Karl Marx, M. Umapathy, A. Girija, <b>D. Ezhilarasi</b>	Discrete Time Sliding Mode Control Using Fast Output Sampling Feedback for Piezoelectric Actuated Structures	Sensors & Transducers	102 (3)	71-83	2009	
K. Dhanalakshmi, M. Umapathy, <b>D. Ezhilarasi</b> , C. Chandravadhanam	Control of SMA Actuated beam using periodic Output Feedback Control	The Mediterranean journal of Measurement and Control	4 (1)	8-14	2008	
R. Maheshwari, M. Umapathy, L.R. Karlmarx, <b>D. Ezhilarasi</b>	Design and Implementation of – Output Feedback Control for Piezo actuated structure Using Embedded System	Sensors & Transducers Journal	93 (6)	29-36	2008	
S. Neduncheliyan, <b>D. Ezhilarasi</b> , M. Umapathy, B. Vasuki	Control of Piezo actuated structure using an Interval method	Journal of instrumentation Science & Technology	35 (4)	385-397	2007	
<b>D. Ezhilarasi</b> , M. Umapathy, B.Bandyopadhyay	Design and experimental evaluation of piecewise output feedback control for structural vibration suppression using PZT patches	Journal of Smart Materials and Structures	15	1927-1938	2006	

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(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page No.	Conf. Theme	Venue	Year
V. K. Viekash, Pramoth Arun, Gaurav Devendra Nagotanekar, <b>Ezhilarasi D</b>	Deep Learning Based Muscle Intent Classification in Continuous Passive Motion Machine for Knee Osteoarthritis Rehabilitation	International IEEE conference- IEEEMASC ON 2021				2021
Senthur Raj, Manu Aatitya R P, Jack Samuel S, J Veejay Karthik and <b>D. Ezhilarasi</b>	Ibex: A reconfigurable ground vehicle with adaptive terrain navigation capability	IEEE International Conference on Robotics and Automation (ICRA)			Paris, France	2020
Karthik, S., Akil, M., Joseph, J.A., <b>Ezhilarasi, D</b>	TIESTO: Tested Intelligent Systems for Traffic Operations	6th, ICAC3 2019				2019
Himadri Poddar, <b>D. Ezhilarasi</b>	Trajectory Planning and Obstacle Avoidance for cascaded PD controlled Quadrotor	ICECON 2019			NITT	2019
S. Arutselvi, <b>D. Ezhilarasi</b> , Galla Divyanshi, Anuradha Nayak, TSV Krishna Sai	Meandered Broadband Vibration Energy Harvester	ICECON 2019			NITT	2019
Anjali S Nair, <b>Ezhilarasi D</b>	Performance analysis of Super Twisting Sliding Mode Controller in Lower Extremity	IEEE ICESIP 2019			IIITD&M Kancheepuram, Chennai	2019

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	Exoskeleton					
Chinari Subhechha Subudhi, <b>D Ezhilarasi</b>	Modeling and Trajectory Tracking with Cascaded PD Controller for Quadrotor	Procedia Computer Science (Elsevier)	952-979			2018
Bhabani Sankar Padhy and <b>D. Ezhilarasi</b>	Damage Detection In Non-Uniform Cantilever Beam Having Two Different Types Of Crack Using Strain Energy Analysis	International Conference on Frontiers in Engineering, Applied Sciences and Technology			NITT, India	2017
N. Sampath, <b>D. Ezhilarasi</b>	Analysis of Cantilevered Piezoelectric Harvester with Different Proof Mass Geometry for Low Frequency Vibrations	International Conference on Smart Engineering Materials [ICSEM-2016]			Banglore, India	2016
N. Sampath, <b>D. Ezhilarasi</b>	Analysis of Cross Shaped Cantilever With C Shaped Proof Mass for Vibration Energy Harvesting	International Conference on Smart Engineering Materials			Banglore, India	2016
Bhabani Sankar Padhy, <b>D. Ezhilarasi</b>	Detection and Stiffness Analysis of Inclined Height Crack in Cantilever Beam using Strain Energy Analysis	International Conference on Advanced in Dynamics, Vibration and Control			NIT Durgapur	2016
Bhabani Sankar Padhy , <b>D. Ezhilarasi</b>	Detection of Inclined Edge Crack in Cantilever Beam using Modal Analysis	International Conference on Materials, Design and Manufacturing Process			Anna University (CEG), Chennai	2016



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Bhabani Sankar Padhy , Laji C A, <b>D. Ezhilarasi,</b>	Detection Of Longitudinal Cracks in Beam Structures Using Electromechanical Impedance and Frequency Analysis	ISSS National Conference on MEMS Smart Materials, Structures and Systems			CUSAT, Kochi, India	2015
Minu A Pillai, <b>Ezhilarasi D</b>	Improved Acoustic Energy Harvester using Tapered neck Helmholtz Resonator and Piezoelectric Cantilever undergoing concurrent bending and twisting	12th International Conference on Vibration Problems (ICOVP 2015)			IIT Guwahati	2015
M. Ganesan, <b>D. Ezhilarasi</b>	Design of Nonlinear Model reference Adaptive Controller for Automatically Driven Indian High-speed Trains	3rd International Conference of Transportation research Group of India			Kolkata	2015
Minu A Pillai, <b>Ezhilarasi D</b>	Acoustic Energy Harvesting using Helmholtz resonator with tapered neck	COMSOL conference-2014			Bangalore	2014
Kattilapparambu Abhfeeth, <b>Ezhilarasi D</b>	GSM Based RF Energy Harvesting	ISSS Conference on Smart Materials, Structures and Systems			IISC Bangalore	2014
S. Harihara Krishnan, <b>D. Ezhilarasi,</b> G.Uma and M. Umopathy	Experimental Investigation of A Novel Hybrid Energy Harvesting System Using Ferroelectric	Texas Instruments India Educators' international Conference			Bangalore	2013

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	Material					
Y.Sujan, B.Vasuki, G. Uma, <b>D Ezhilarasi, K Suresh</b>	Thickness sensor for Ferromagnetic sheets	6th International conference on Sensing Technology			Kolkata	2012
Akshay C, Nitin Karnwal, Abhfeeth K A, Rohan Khandelwal, Tapas Govindraju, <b>Ezhilarasi D, Sujan Y</b>	Wireless sensing and control for precision Greenhouse management	6th International conference on Sensing Technology			Kolkata	2012
<b>D. Ezhilarasi, K. Srikanth Reddy, M. Umamathy, B.Bandyopadhyay</b>	Design and Implementation of Second order SMC for vibration control of a mass loaded smart cantilever beam with temperature uncertainty	12thIEEE International workshop on Variable Structure Systems			IIT Mumbai	2012
S Harihara Krishnan S, <b>D Ezhilarasi, G Uma, M Umamathy, Y Sujan</b>	Enhancement of Vertical Displacement in Electrothermal Microactuator	Vith international ISSS Conference on Smart Materials, Structures and Systems			IISC Bangalore	2012
L.R. Karl Marx, M. Umamathy, <b>D. Ezhilarasi</b>	Discrete Time Sliding Mode Control with Nonlinear Sliding Surface for Piezo Actuated Structures	Vith international ISSS Conference on Smart Materials, Structures and Systems			IISC Bangalore	2012
P. Pavan Satya kumar, <b>D. Ezhilarasi, M. Umamathy</b>	Experimental Investigation of Energy Harvesting using Piezoelectric	Vith international ISSS Conference on Smart Materials,			IISC Bangalore	2012

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	Material	Structures and Systems				
M.S. Sekhar, <b>D. Ezhilarasi</b> , A. Shankar Ram	Remote Monitoring and Control of a Temperatute Plant using Zigbee Wireless Communication System	7th International conference on “Trends in Industrial Measurement and Automation”	369-374		CSIR Madras, Chennai	2011
<b>D.Ezhilarasi</b> , M. Umopathy, B.Bandyopadhyay	Design and Implementation of Fast Output Sampling Feedback Control for Smart Structures via Reduced Order Model	International conference on Vibration Engineering and Technology of Machinery,	517-524		IIT Delhi	2010
L.R. Karl Marx, M. Umopathy, <b>D.Ezhilarasi</b>	Design and Implementation of discrete Time Sliding Mode Control with Nonlinear Sliding Surface for Piezo Actuated Structures	6th International conference on Vibration Engineering and Technology of Machinery	509-516		IIT Delhi	2010
L.R. Karl Marx, M. Umopathy, <b>D.Ezhilarasi</b>	Design and Implementation of discrete Time Sliding Mode Model Following Control with Nonlinear Sliding Surface	34th National Systems Conference NSC-2010				2010
<b>D.Ezhilarasi</b> , J. Arun Shankar, M. Umopathy	Implementation of information filter for vibration control of a smart cantilever beam	International conference Control, Communication and Power Engineering	137-140			2010

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<b>D. Ezhilarasi,</b> M. Umapathy	Design and Implementation of Generalized Predictive Control for Piezo Actuated Cantilever Beam	6th International conference on Trends in Industrial Measurement and Automation	176-181		MIT campus, Anna university, Chennai	2009
Joan of Arc, <b>D.Ezhilarasi,</b> S.K. Patnaik, B. Umamaheswari	Design of Loop-Shaping Hinfinity Controller for Vibration Control of a Smart Beam	6th International conference on Trends in Industrial Measurement and Automation	221-227		MIT campus, Anna university, Chennai	2009
<b>D. Ezhilarasi,</b> J.Rajalakshmi	Design of Self Tuning Regulator for Vibration Control of Piezo Actuated Cantilever Beam	International Conference on Advanced Manufacturing and Automation			Kalasalingam university, Virudunagar	2009
R. Shanthi, <b>D. Ezhilarasi</b>	Design of Fuzzy Logic Controller for Piezoelectric Smart Beam	International Conference on Advanced Manufacturing and automation			Kalasalingam university, Virudunagar	2009
R. Shanmugapriya, <b>D. Ezhilarasi</b>	Design of Multirate Output Feedback Controller for Liquid Level System	Proceedings of the National Conference on Power Electronics and Renewable Energy Systems			SSN College of Engineering, Chennai	2009
D. Maheshwari, S.K. Patnaik, <b>D. Ezhilarasi,</b> B. Umamaheswari	Design of output feedback-based sliding mode controller for piezio actuated cantilever beam	National Conference on Power Electronics and Renewable			SSN College of Engineering, Chennai	2009

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		Energy Systems				
K Dhanalakshmi, M.Umapathy, <b>D.Ezhilarasi</b> , C Chandravathanam	Variable Structure Control of Flexible Smart Structure with Shape Memory Alloy Actuators	SPIE International conference on Smart Structures and Materials			San Diego, USA	2007
R. Maheshwari, M. Umapathy, <b>D. Ezhilarasi</b>	State Feedback based Periodic Output Feedback Control for Piezoactuated Beam	Proceeding of 3rd National Conference on Instrumentation and Control Engineering			NITT, India	2007
<b>D. Ezhilarasi</b> , M. Umapathy, B. Bandyopadhyay, G. Uma	Design and Experimental Evaluation of Composite Output Feedback Control for Smart Structures	IEEE International Conference on Industrial Technology	692 -697		Mumbai	2006
<b>D. Ezhilarasi</b> , M. Umapathy, B. Bandyopadhyay	Design and Experimental Evaluation of Simultaneous Periodic Output Feedback Control for Smart Structures	2nd International Congress on Computational Mechanics and Simulation	642 -645		IIT Guwahati	2006
S. Soundaravalli, M. Umapathy, <b>D. Ezhilarasi</b> , J. Balasubramani	H Infinity Vibration Controller for Smart Cantilever Beam	2nd International Congress on Computational Mechanics and Simulation	501 -505		IIT Guwahati	2006

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K Dhanalakshmi, C Chandravathana m, M Umapathy, <b>D Ezhilarasi</b>	Design of State Feedback Control for Vibration Suppression of Shape Memory Alloy actuated Flexible Beam	9th International Workshop on Smart Materials and Structures			Toronto, Ontario, Canada	2006
<b>D Ezhilarasi,</b> G Uma, K Dhanalakshmi	Design of Generalized Predictive Control for Smart Structures using State Space Approach	National Conference on Process Identification , Control and Diagnostics			Annamalai University  Chidambara m	2003

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