Dr. Shahida Khatoon

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Skype-Id: live:shahidakhatoon2008_1
LinkedinProfile: https://www.linkedin.com/in/shahida-khatoon/

Contact Information   Electrical Engineering Department,
Faculty of Engineering and Technology
Jamia Millia Islamia, New Delhi ,
India

Academic Achievements

Teaching Experience

Total: 29 years; Professor: 10 Years, **Reader:** 06 Years, **Lecturer:** 13 Years

PhD Supervised

Completed : 10   Submission : **01**   In Progress : **06**

Publications

Total: 105;   Journal: 33   Conferences/Seminars/Workshops: **72**

Research Interests

Control Systems, Robotics, Automation and Artificial Intelligence
Applications to Power and Control Systems Engineering

Work Experience

Professor (2011 to date), Electrical Engineering Department
(**NBA Accredited)**, Faculty of Engineering and Technology,
Jamia Millia Islamia, New Delhi, India

Associate Professor (2005 to 2011), Electrical Engineering Department
Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi

Assistant Professor (992 to 2005), Electrical Engineering Department
Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi

Senior Engineering Assistant (1990 to1992) , AJHK Mass Communication
Research Center, Jamia University, New Delhi, India

Education

PhD, Control and Instrumentation, 2004
Electrical Engineering Department, Faculty of Engineering and Technology,
Jamia Millia Islamia, New Delhi, India
Thesis Topic: Vision Guided Navigation of Autonomous Mobile Robots using
Neuro-Fuzzy Controller
M. Tech, Control and Instrumentation, 1995
Electrical Engineering Department, Indian Institute of Technology (IIT),
New Delhi, India, CGPA: 3.63/4.0
Thesis Topic: A Functional Link Approach to Artificial Neural Network
based Path Planning for 3- Link Robot Manipulator
B. Tech, Electrical Engineering , 1990
Electrical Engineering Department, Faculty of Engineering and Technology,
Jamia Millia Islamia, New Delhi, India
• Silver Medal, With Honors, CGPA: 3.81/4.0
• Thesis Topic: Unijunction Transistor (UJT) based Relaxation
Oscillator Design

Teaching Experience

Graduate Level

i)	Optimal Control Theory	ii)	Adaptive and Robust Control
iii)	Renewable Energy Resources	iv)	SCADA and Smart Grid
v)	Power System Deregulation	vi)	System Optimization
vii)	Modelling and Simulation	viii)	Embedded Systems
ix)	ASIC and FGPA Architecture	x)	Microprocessor Architecture
xi)	Computer Networks	xii)	Internet Protocols

Under Graduate Level

(i)	Control System Engineering	ii)	Advanced Control Systems
iii)	Power Systems	iv)	Advanced Power Systems
v)	Circuit Analysis and Synthesis	vi)	Electrical and Electronics Instrumentation
vii)	Digital Electronics	viii)	Computer Fundamentals
ix)	Programming Languages	x)	Data Structures
xi)	Data Mining	xii)	Relational Database Management System
xiii)	Biomedical Instrumentation	xiv)	Microprocessors

Grants

Project Title: Development of an Autonomous Miniature Unmanned Aerial Vehicle (UAV) as Disaster Management Tool (From 2009-2011)
Role: Principal Investigator
Funding Agency: University Grants Commission (UGC) , New Delhi
Amount: 1 0 , 48000 INR
Project Title: Development of wireless sensor network for health monitoring of old age home (From 2010-2013)
Role: Principal Investigator
Funding Agency: Department of Science and Technology (DST), Ministry of Science and Technology, INDIA
Amount: 2 3 , 2 8000 INR

PhD Awarded

1. Himanshu Chaoudhry, "Intelligent Controller Design for Optical Fine Pointing System", 2021.
2. Priti Gupta, "Load Forecasting Techniques", 2021
3. Mohd. Faisal Jalil, Modeling, "Simulation and Analysis of Solar Photo Voltaic Array Under Partial Shading Conditions", 2020
4. Mohd. Shahid, "Intelligent Controller Design for Quad-Rotor UAV", 2018
5. Reshma Ehtesham, "Soft Computing Techniques for PID Controller for Wind Power System", 2016
6. KaukabNaz, "GSM Based Control of Autonomous Mobile Agents", 2015
7. Dhiraj Gupta, "Minimally Controlled Aerial Vehicles for Geographical Survey Application", 2014
8. Ravinder kumar Singh, "Various controllers for Gimbal assembly", 2013
9. Mohd. Muazzam, "Electricity Demand Forecasting Techniques", 2012
10. Arunesh Kumar Singh, "Modelling and Simulation of Eddy Current Braking System for Aircraft Arrester Barrier System", 2010.

PhD Submitted

1. Md. Ishtiyaque, "Optimal Controller Design for Autonomous System"

PhD Registered

1. Huma Khan, "Intelligent Controller Design for Autonomous Systems", 2016
2. Pushpendar, "Real Time Simulation based MPPT for hybrid systems", 2019
3. Kriti, "Optimal Conversion of Noise Pollution into Electricity", 1.10.2019

4. Vaishali Gautam, "Extraction Of Maximum Power From Photovoltaic Array Under Partial Shading Conditions Using Reconfiguration Strategies" , 2021
5. Sajjad Vani, "Intelligent Controller Design Strategies for Mobile Robot platform", 2021
6. Farhat Naseem, "Intelligent Controller Design for Wind Power System", 2021

Professional Services

Program Chair

1. Session Chair, Track 6, Control and Instrumentation, in IEEE INDICON 2020, held on 11-13 Dec. 2020, in Division of Instrumentation and Control , Netaji Subhash University of Technology (NSUT), New Delhi.
2. Session Chair in National Conference on Robotics & Mechatronics (NCORM-2020), held on 3rd-4th March 2020 in Department of Mechanical Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi.
3. Session Chair in New and Renewable Energy Technologies for JTA Multidisciplinary International Conference JTACON-2020, on 16-18 Feb 2020, organized by Jamia Teachers Association, Jamia Millia Islamia, New Delhi.
4. Chairman of the session on Control Systems for International Conference on Power Electronics, Control and Automation (ICPECA-2019) 15-17 Nov, 2019, organized by, Department of Electrical Engineering, Jamia Millia Islamia, New Delhi.
5. Chairman of the session for International Conference on Signals, Machines and Automation (SIGMA 2018), Division of Instrumentation and Control Engineering NSIT Delhi, India, 23-25, Feb 2018
6. Track Chair (Instrumentation and Controls in Buildings, Building Automation), International Conference and Exhibition on Building Utilities(ICEBU-2016) 1-3 Dec, 2016, organized by, Department of Mechanical Engineering, Jamia Millia Islamia, New Delhi.
7. Track Chair (Control Systems) in *Annual IEEE India Conference* (INDICON 2015), 1-3 Dec, 2016, organized by, Department of Electrical Engineering, Jamia Millia Islamia, New Delhi.
8. Session Chair at the First IEEE Uttar Pradesh Section Conference-International Conference on Energy, Economics & Environment "1st UPCON-ICEEE2015" organized by the Departments of Electrical & Electronics Engineering, Galgotias College of Engineering & Technology, Greater Noida, March2015.
9. Session Chair, at the National Conference ETEEE-2015, organized by the department of Electrical Engineering, F/O Engineering and Technology, Jamia Millia Islamia, 2nd and 3rd February 2015.
10. Session Chair at one day workshop ""MATLAB Applications in Power and Control Systems" on 12-3-2015 at Anand Engineering College, Agra

Invited Talks/ Lectures Delivered

1) "Autonomous Mobile Robots: Modelling and Simulation", Department of Mechanical Engineering , Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi, in one week online AICTE sponsored Faculty Development Program FDP on "Robotics and Automation ", 16th June to 30th June 2021.
2) "Optimization Techniques for Control System Design: Innovation and Challenges" , Department of Electrical Engineering , Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi, in one week online AICTE sponsored short term training program STTP on "Role of Energy Management Systems on Smart Grid", 7th June to 12th June 2021.
3) "Robust, Adaptive and Optimal Controller Design Techniques", Department of Instrumentation and Control Engineering Dr. B. R. Ambedkar National Institute of Technology, Jalandhar - 144 011 (Punjab), India, TEQIP-III sponsored Short Term Course

(STC) on "Optimization and Control Design Techniques Innovations and Challenges" from September 17-21, 2020.

4) "MATLAB based Control System Design", Invited talk in one day workshop on MATLAB Applications in Power and Control Systems, Department of Electrical Engineering, SGT University, Gurgaon, Haryana, 07-03-2016.

5) "Assembly of an Experimental Quad-Rotor type UAV for testing a Novel Autonomous Flight Control Strategy, Anand Enginnering Collegee, Agra, 06-04-2012.

6) "Fuzzy Logic Controller for wind Power System", Anand Enginnering Collegee, Agra, 02-03-2014.

7) "Virtual Instrumentation", One day workshop on "Virtual Power Laboratory, Continuing Education Program, K. P Engineering College, Agra, 18.02.2012.

8) "GSM based Power Management System", National Conference on Recent Advances in Electrical Engineerig , 16-17 dec, 2011, Delhi Technological University, New Delhi, INDIA

9) "GSM based Power Management System", ISTE short term training program at Aditya Institute of Technology, New Delhi, 17.03.2009.

10) "Behaviour based Control", Laser Science and Technology (LASTEC), DRDO , New Delhi, Continuing Education Program (CEP) on "Recent Advances in Control and Instrumentation, 27.09.2008.

11) "Robotic Learning Kits as Teaching Aids for Electromechanical Engineering", Department of Electronics Engineering, Departmental Lecture Series, GNIIT, Greater NOIDA, UP,27.08.2008.

12) "Design and Application of PID Controllers", Department of Electrical and Electronics Engineering, YMCA University of Science and Technology, Faridabad, Haryana, 12.11.2011

Administrative Committee Member

- Deputy Dean Student Welfare, JMI, 2019 till date
- Library In-charge, Faculty of Engineering and Technology, JMI, 2020-till date
- In-Charge Departmental Annual Magazine, JMI, 2017- Till date
- Committee member for Annual Convocation , since 2011 till date
- Assistant Provost (2007-2008), Mirudula Sarabai Working Women's hostel, JMI
- Senior Warden (2006-2007), Mirudula Sarabai Working Women's hostel, JMI
- Warden (2004-2005), Mirudula Sarabai Working Women's hostel, JMI
- Assistant Proctor
- Member, Flying Squad, University Examinations
- Coordinator, B.E. (Self Finance) Course
- Executive Member , Jamia Teachers Association (JTA)

Awards	Career Award for Young Teachers (CAYT), 2008, All India Council for Technical Education, (AICTE), New Delhi.
Professional Society Membership	Senior Member IEEE (USA) ISTE Life Member (Indian Society for Technical Education) Member System Society of India Life Member of Institution of Electronics and Telecommunication Engineers, India
Technical Skills	Extensive hardware and software experience in networking and information technology Matlab experience: linear algebra, Fourier transforms, nonlinear numerical methods, polynomials, statistics, and visualization Matlab toolboxes: communications, control system, filter design, genetic algorithm and direct search, signal processing, and system identification

Programming languages: C, C++, visual C++, Assembly, PL/SQL,HTML, UNIX shell scripting, and SQL

Applications: L^ATEX, Microsoft Office, and other common productivity packages for Windows, OS X, and Linux platforms

Operating Systems: Linux, MS Windows 95/98/2000, MS Windows NT, Window XP Professional

Publications

International Journal Papers

1) Arunesh Kumar Singh, Shahida Khatoon, Kriti and Abhinav Saxena, "Impact Review Analysis & Scope of Noise Pollution for Energy Harvesting", Journal of Engineering Research EMSME Special Issue August 2021-121, ISSN: 2307-1877, pp. 112.

2) Mohd. Faisal Jalil, Shahida Khatoon, Ibraheem, R. C Bansal, "Review of PV array modelling , configurations and MPPT techniques", International Journal of Modelling and Simulation, 2021, Publisher: **Taylor and Francis** ISSN: 02286203, pp. 1-18.

3) Shahida Khatoon, Javed Ahmed, Mohd. Shahid, "IOT Controlled Dual-Strategy Based Autonomous Robotic Vehicle for Bomb Detection", Design Engineering (Toronto), Year 2021, Issue 7, ISSN: 0011-9342, page no. 371-384.

4) Mohd. Shahid, Shahida Khatoon, Ibraheem, "Optimal Control Strategy for Quadrotor UAVs", Design Engineering (Toronto), Year 2021, Issue 7, ISSN: 0011-9342, page no. 398-441.

5) Shahida Khatoon, Nowreen Mukhtar, Naimul Hasan, Mohammad Shahid, Md Istiyaque, Khan Azmat "A review of modeling and control of inverted pendulum system" , Design Engineering (Toronto), Year 2021, Issue 7, ISSN: 0011-9342, page no. 415-424.

6) Huma Khan, Shahida Khatoon, and Prerna Gaur, "Comparison of various controller design for the speed control of DC motors in two wheeled mobile robots", International Journal of Information Technology, (02nd January, 2021) Publisher **Springer,** Vol. 13, page no.713-720, ISSN 0045-7906.

7) Mohd Faisal Jalil Shahida Khatoon, Ibraheem Nasiruddin, and R.C. Bansal "An improved feasibility analysis of photovoltaic array configurations and reconfiguration under partial shading conditions", *Electric Power Components and Systems,* Vol. 48 (9-10), (6th October,2020), pages 1077-1089 Publisher: **Taylor and Francis**.

8) Ibraheem Nasiruddin, Shahida Khatoon, Mohd Faisal Jalil and R.C. Bansal "Shade diffusion of partial PV array by using odd-even structure", *Solar Energy,* Vol. 181 **(2019)**, pages 519-529, Publisher **Elsevier**.

9) Shahida Khatoon, Md. Istiyaque, Naimul Hasan, D. K. Chaturvedi and Salman Ahmed Khan "Optimal Output Vector Feedback Control Strategy for Double Inverted Pendulum" *International Journal of Advanced Science and Technology (IJAST),ISSN No: 2207-6360,Vol. 29, No. 4(2020),* pp. 10729-10740.

10) Ravindra Singh, Shahida Khatoon, Himanshu Chaudhary, Ashish Pandey, "Dynamic Modelling , Control and Experimental Validation of Gimballed Sensor System for precision pointing applications, International Journal of Intelligent and Fuzzy Systems, Vol. 39 (2020), Publisher **IOS Press.** pp 3387- 3399.

11) Ravindra Singh , Shahida Khatoon , Himanshu Chaudhary ,*, Ashish Pandey , M. Hanmandlu, "Neural-fuzzy controller configuration design for an electro-optical line of sight stabilization system", International Journal of Computers and Electrical Engineering, ISSN : 0045-7906, Vol.88, 12 September 2020, Publisher: **Elsevier** pp.106837-1 to 106837-21.

12) Shahida Khatoon, Ibraheem Nasiruddin, Mohammad Shahid, "Design and Simulation of a Hybrid PD-ANFIS Controller for Attitude Tracking Control of a Quadrotor UAV" Arabian Journal for Science and Engineering, Publisher: Springer Berlin Heidelberg ISSN No-2193-567X, Vol-42, No.12, pp- 5211-5229,Nov-Dec 2018.

13) Arunesh Kumar Singh, D K Chaturvedi, Ibraheem Nasiruddin, S. Khatoon and M M Gupta "Intelligent controllers for eddy current energy absorber of aircraft arrester barrier system "Engineering Intelligent System, Vol. 25, 2017.

14) Shahida Khatoon, Ibraheem Nasiruddin, and Reshma Ehtesham, "Optimal and Suboptimal Controller Design for Wind Power System", Renewables: Wind, water and Solar, a SPRINGER open journal, *Renewables (2016) 3:1,* DOI 10.1186/s40807-015-0020-2

15) Shahida Khatoon, Ibraheem Nasiruddin, and Reshma Ehtesham,Ramesh C. Bansal, "Optimal Output Vector Feedback Control Strategy for Wind Power Systems", Electric Power Components and Systems, *Taylor & Francis* Group, 43(2015), No.8-10, DOI: 10.1080/15325008.2015.1022910., pp.1122-1132.

16) Shahida Khatoon, Ibraheem Nasiruddin, Reshma Ehtesham, "Optimal Control Design for Wind Power Systems", International Journal of Electronics, Electrical and Computational System IJEECS, Academia Science, ISSN 2348-117X Vol. 4, pp. 156- 163, March 2015.

17) Shahida Khatoon, Ibraheem Nasiruddin, Kaukab Naz, "Eigen Value Analysis of Optimal Controller Design for Wheeled Autonomous Mobile Robot", International Journal of Computer Applications, Vol. 71 – No. 1, pp. 126-131, ISSN (0975 – 8887), October 2014.

18) Shahida Khatoon, Ibraheem Nasiruddin, Mohd Faisal Jalil, "Analysis of Maximum Power Point Tracking for Solar Photovoltaic Array under Partial Shading Conditions", International Journal of Electronics, Electrical and Computational System (IJEECS), pp. 202-207, Vol. 4, Special Issue March 2015.

19) Shahida Khatoon, Mohammad Shahid, Ibraheem Nasiruddin, "Pitch Control Using Hybrid PID-Fuzzy Controller", International Journal of Computer & Mathematical Sciences (IJCMS), pp.176-183, Volume 4, ISSN 2347 – 8527, Special Issue March 2015.

20) Shahida Khatoon, Manoj Kumar Singh, Ahmad Saad Khan, "Development of Zigbee-Wifi-Wimax Hybrid Wireless Sensor Network based Telemedicine System", International Journal of Computer Applications Volume 83 – No 8, December 2013, pp. 26-32

21) Shahida Khatoon, Dheeraj Gupta, Ahmad Saad Khan, "Assembly of an Experimental Quad_Rotor Type UAV for testing a Novel an Autonomous Flight control strategy", International Journal of Advanced Computer research, Vol.3 No.4, Dec 2013, pp. 111-120.

22) Shahida Khatoon and Ibraheem Nasiruddin "Autonomous Mobile Robot Navigation by Combining Local and Global Techniques" *International Journal of Computer Applications* Vol 37, No.3. pp. 1-10, January 2012.

23) Ravinder Kumar Singh, Shahida Khatoon, M. Hanumandlu, "An Adaptive Fuzzy Logic Controller Trained by Particle Swarm Optimization for Line of Sight Stabilization", International Journal of Computer Applications (0975 – 8887) Volume 39– No.4, February 2012, pp. 32-36.

24) Shahida Khatoon, "Impacts of Wind Power Variations on Frequency Related Power System Operations", International Journal of Computer Applications (0975 – 8887) Volume 39– No4, February 2012, pp. 8-15, ISSN: 0975-8887.

25) Ravinder Kumar Singh, Shahida Khatoon, M. Hanumandlu, "A Choquet Fuzzy Integral Controller for Stabilization and Tracking Application", International Journal of Advanced Materials Research. Vol. 403-408, 29th Nov, 2011, pp. 5000-5006, ISSN: 1022-6680.

26) Shahida Khatoon, Dhiraj Gupta, "Design and Assembly of an Experimental Fixed Wing Remote Controlled Glider Plane", International Journal of Applied mechanics and Materials, special issue on Aerospace Engg. Vol. 110,116, 24th Oct 2011, pp. 1582-1588, ISSN: 1662-7482.

27) D.K. Chaturvedi, Ibraheem, A.K. Singh, Shahida Khatoon, "Modelling and Simulation of Synergism of Hydraulic and Eddy Current Absorber for Aircraft Arrester Barrier System", *AMSE, France*, Vol.-83, issue-2, pp. 80-88, 2010.

28) A.K. Singh, D.K. Chaturvedi, Ibraheem, Shahida Khatoon, R.K. Sharma, "Modelling of Eddy Current Braking for Energy Absorbing System of Aircraft Arrester Barrier System" Journalof Aerospace Science and Technologies, A.S.I., Vol.-62, No. 3, pp 196-202, August, 2010.

29) Ravinder Kumar Singh, Shahida Khatoon, M. Hanumandlu, "Modeling and Simulation of the Dynamics of Large Size Stabilized Gimbal Platform Assembly", International Journal of Science and Technology in Production and Manufacturing,Vol.1, No.2, (2009), pp.111-119, ISSN:8791 -724-622 (ABN).

30) Shahida Khatoon, Mohd. Muazzam, Ibraheem, Chaturvedi D K, "Electric Demand Forecasting using Linear Programming Method in Agriculture Sector", URJAVAN, Urjavan Foundation Bombay (ISSN:1050-0591), p.p 6-9, February-March 2009.

31) Ibraheem, Shahida Khatoon, M. Muazzam, B. Singh, "Electricity Demand Forecasting", VidyutBharati, Quarterly Journal, CEA, No.4, Vol-30, pp 8-19, April, 2008.

32) Ibraheem, P. Kumar and Shahida Khatoon, "Overview of Power System Operational and Control Philosophies" International Journal of Power and Energy *Systems,* vol. 26, no. 1, pp. 1-11, 2006.

33) Ibraheem, P. Kumar and Shahida Khatoon, "Effect of Parameter Uncertainties on Dynamic Performance of an Interconnected Power System Incorporating AC/DC Links", International Journal of Power and Energy Systems, vol.25, no. 3, pp. 198-210, 2005.

Book Chapters

1) Arunesh Kumar Singh, Shahida Khatoon, and Kriti, "Identification of Parameters for Noise Pollution based Electrical Energy Converter", Springer Nature Singapore Pte Ltd. 2021, J. Singh et al. (eds.), *Innovations in Cyber Physical Systems*, Lecture Notes in Electrical Engineering 788, https://doi.org/10.1007/978-981-16-4149-7_505, page no. 561-568

2) Shahida Khatoon, Md. Istiyaque, Sajad Ahmad Wani, and Mohammad Shahid, "Design Kinematics and Control for a Differential Drive Mobile Robot", Renewable Power for Sustainable Growth, under

book series of Lecture Notes in Electrical Engineering LNEE, Publisher Springer Singapore, Vol. 723, Book ISBN: 978-981-33-4079-4, Year 2021, page no. 189-197

3) Mohammad Shahid, Md. Istiyaque, Shahida Khatoon, and Ibrahim, " Trajectory Tracking of Quadrotor Using LQR Controller", Renewable Power for Sustainable Growth, under book series of Lecture Notes in Electrical Engineering LNEE, Publisher Springer Singapore, Vol. 723, Book ISBN: 978-981-33-4079-4, Year 2021, page no. 215-225

4) Shahida Khatoon, Huma Khan, Prerna Gaur, and Mohd Faisal Jalil, " Optimal Controller Design for Altitude Control of Modern Airship" Lecture Notes in Mechanical Engineering, Recent Advances in Mechanical Engineering, ISBN 978-981-15-8703-0, Publisher Springer, Year 2021, page no.205-212.

5) Shahida Khatoon, Md. Istiyaque, Naimul Hasan, and D. K. Chaturvedi, " Two-Wheeled Self-Balancing Mobile Robot Using Kalman Filter and LQG Regulator " Lecture Notes in Mechanical Engineering, Recent Advances in Mechanical Engineering, ISBN 978-981-15-8703-0, Publisher Springer, Year 2021, page no.213-222

6) Himanshu Chaudhary, Shahida Khatoon, Ravindra Singh, and Ashish Pandey, " Grey Wolf Optimizer-Based PID Controller Design for Laser Beam Pointing Applications", Lecture Notes in Mechanical Engineering, Recent Advances in Mechanical Engineering, ISBN 978-981-15-8703-0, Publisher Springer, Year 2021, page no. 253-260

7) Shahida Khatoon, Huma Khan, and Prerna Guar, " PID Design-Utilized Controller for DC Engines Employed in Wheeled Movable Golem", Lecture Notes in Mechanical Engineering, Recent Advances in Mechanical Engineering, ISBN 978-981-15-8703-0, Publisher Springer, Year 2021, page no. 667-674

International Conference Papers

1) Shahida Khatoon, Mohd Faisal Jalil and Rahma Aman, "Modeling and performance analysis of a PV system under mismatch scenarios", International Online Conference On Smart Grid Energy Systems and Control (SGESC-2021) (March19-21, 2021)

2) A.K. Singh, S. Khatoon, Kriti, "Identification of parameters for noise pollution based electrical energy converter", International Conference on Innovations in Cyber Physical Systems (ICICPS-2020) organized by HMRITM college, New Delhi, on 23rd October 2020.

3) A.K. Singh, S. Khatoon, Kriti, A. Saxena, "Impact review analysis & scope of noise pollution for energy harvesting", Ist International Conference on Energy, Materials Sciences & Mechanical Engineering (EMSME-2020), organized by NIT Delhi, 31st October 2020.

4) Shahida Khatoon, Md. Istiyaque, Sajad Ahmad Wani and Mohammad Shahid "Design Kinematics and Control for a Differential Drive Mobile Robot" International Conference on Renewable Power (TEQ-20),13, 14 July, 2020; BGSBU, Rajouri, Jammu and Kashmir (India)

5) Mohammad Shahid, Md. Istiyaque, Shahida Khatoon, and Ibrahim "Trajectory Tracking of Quadroter using LQR Controller" International Conference on Renewable Power (TEQ-20),13, 14 July, 2020; BGSBU, Rajouri, Jammu and Kashmir (India)

6) Shahida Khatoon, Huma Khan, Prerna Gaur, and Mohd Faisal Jalil, " Optimal Controller Design for Altitude Control of Modern Airship" International Conference on Innovative Technologies in Mechanical Engineering (ITME-2019), organized by Department of Mechanical Engineering of KIET Group of Institutions, Delhi-NCR, Ghaziabad, India. October 2019.

7) Shahida Khatoon, Md. Istiyaque, Naimul Hasan, and D. K. Chaturvedi, " Two-Wheeled Self-Balancing Mobile Robot Using Kalman Filter and LQG Regulator " International Conference on Innovative Technologies in Mechanical Engineering (ITME-2019), organized by Department of Mechanical Engineering of KIET Group of Institutions, Delhi-NCR, Ghaziabad, India. October 2019.

8) Himanshu Chaudhary, Shahida Khatoon, Ravindra Singh, and Ashish Pandey, " Grey Wolf Optimizer-Based PID Controller Design for Laser Beam Pointing Applications", International Conference on Innovative Technologies in Mechanical Engineering (ITME-2019), organized by Department of Mechanical Engineering of KIET Group of Institutions, Delhi-NCR, Ghaziabad, India. October 2019.

9) Shahida Khatoon, Huma Khan, and Prerna Guar, " PID Design-Utilized Controller for DC Engines Employed in Wheeled Movable Golem", International Conference on Innovative Technologies in Mechanical Engineering (ITME-2019), organized by Department of Mechanical Engineering of KIET Group of Institutions, Delhi-NCR, Ghaziabad, India. October 2019.

10) Shahida Khaton, D. K Chaturvedi, Naimul Hasan, Md. Istiyaque, "Optimal Controller Design for Two Wheel Mobile Robot" 3rd IEEE Computational Intelligence on Power, Energy and Controls With Their IMPACT on Humanity(CIPECH-2018), Ghaziabad(India) pp 161-165, ISBN No. 978-1-5386, 1st -2nd November 2018.

11) Mohd faisal Jalil, Shahida Khaton, and Ibraheem Nasiruddin "Improved Design Analysis of Photovoltaic Modules and Arrays Under Varying Condition" " 3rd IEEE Computational Intelligence on Power, Energy and Controls With Their IMPACT on Humanity(CIPECH-2018), Ghaziabad(India) pp 68-75, ISBN No. 978-1-5386, 1st -2nd November 2018.

12) Himanshu Chaudhary, Shahida Khaton, Ravindra Singh and Ashish pandey, "Modeling and Simulation of Fast Steering Mirror Plant for Laser Pointing Application" " 3rd IEEE Computational Intelligence on Power, Energy and Controls With Their IMPACT on Humanity(CIPECH-2018), Ghaziabad(India) pp 102-106, ISBN No. 978-1-5386, 1st -2nd November 2018.

13) Himanshu Chaudhary, Shahida Khaton, Ravindra Singh and Ashish pandey, "Fast Steering Mirror for Optical Fine pointing App: A Review Paper" " 3rd IEEE Computational Intelligence on Power, Energy and Controls With Their IMPACT on Humanity(CIPECH-2018), Ghaziabad(India) pp 156-160, ISBN No. 978-1-5386, 1st -2nd November 2018

14) Shahida Khaton, D. K Chaturvedi, Naimul Hasan, Md. Istiyaque, "Observer Based Controller Design for Inverted Pendulum System" 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2018), 22-24 October 2018.

15) Shahida Khaton, D. K Chaturvedi, Naimul Hasan, Md. Istiyaque, "Optimal Control of a double inverted pendulum by linearization technique "International conference on Multimedia Signal Processing and Communication Technology (IMPACT)" held at Aligarh Muslim University AMU November 24-26, 2017.

16) Shahida Khaton, Naimul Hasan, Md. Istiyaque, Adil Khan and D. K Chaturvedi "Modeling and Optimal Control Design for an Inverted Pendulum System" National system conference (NSC) 2-Dec-2017, in Dayalbagh Educational Institute Dayalbagh, Agra U.P, India.

17) Mohd Faisal Jalil, Shahida Khaton, and Ibraheem Nasiruddin "Improved Mathematical modeling and Analysis of photovoltaic modules and arrays" National system conference(NSC) 2-Dec-2017, in Dayalbagh Educational Institute Dayalbagh, Agra U.P, India.

18) Shahida Khaton, Himanshu Chaudhary, Ravindra Singh and Ashish Pandey "Analysis and Design of Fast Steering Mirror in FSM Applications" National system conference(NSC) 2-Dec-2017, in Dayalbagh Educational Institute Dayalbagh, Agra U.P, India.

19) Shahida Khaton, Reshma Ehtasham, Ahmar Khan "Comparasition of Interpolation Method and Routh Approximation Techniques for Model Order Reduction" National system conference(NSC)2017, in Dayalbagh Educational Institute Dayalbagh, Agra U.P, India.

20) Himanshu Chaudhary, Shahida Khaton, Ravindra Singh and Ashish pandey "Control Configuration Design of Fast steering Mirror for optical Fine Pointing System" Nanofim IEEE Conference Gautam Budh University Nov 2017

21) Ahmad Saad Khan, Shahida Khatoon, "Design and Development of Android App for Automatic Car Parking System", accepted for publication in the 4th IEEE International Conference on Cyber Security and Cloud Computing (IEEE CSCloud 2017) June 26-28, 2017, Columbia University, New York, USA.

22) Shahida Khatoon, Huma Khan, "Comparative Study of Fibonacci Pattern and Conventional Pattern of Solar Cell", communicated for publication in 6th IEEE International Conference on Computer Applications in Electrical engineering-Recent Advances CERA 2017 to be held at IIT Roorky on Oct 6th-7th 2017

23) Ibraheem, Shahida Khatoon, Md Istiyaque and Akbal Hanoon, "Adaptive Threshold Memristor Model" 1st International Conference on Computers and Electronics Engineering, (ICCEE-2016), Hyderabad India, ISBN(13):978-93-85880-97-1, January. 9-2016.

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