

Mr.AJITH.B.SINGH

Designation : Assistant Professor

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Teaching Experience : 7 years, 10 months

Qualification : PhD(Pursuing), M Tech (Control & Instrumentation), BE (EIE)

Special Areas of Interest : Sensor Technology, Process Control & Automation, PLC, Adaptive Control & System Identification.

Workshops / Seminars / Conferences organized	
Title	Funded By
Workshop on "Recent Trends in Industrial Instrumentation & its Applications"	EIE Association : SIT
AZAADI'70	ICE Association: SKCT
Flex Design	Instrumentation & Control Engineering Association
Contraption	Instrumentation & Control Engineering Association
Art Galleria	Instrumentation & Control Engineering Association
Swachtha	Instrumentation & Control Engineering Association
Vision of Kalam	Instrumentation & Control Engineering Association
Engineers day	Instrumentation & Control Engineering Association
Craft from waste	Instrumentation & Control Engineering Association
Project expo – Robo land	Instrumentation & Control Engineering Association
Symposium Poster Presentation	Instrumentation & Control Engineering Association
Guest lecture on "Control Systems"	Dr.Dharmalingam BHEL, Trichy
AVANTHAA 2018	Instrumentation & Control Engineering Association
Department Familiarization and Road Map for ICE students	Instrumentation & Control Engineering Association
Session on "Thermography"	Instrumentation & Control Engineering Association
Guest Lecture on "Control schemes, control valves and controlling of boiler drum level in industries"	Dr.S.Dharmalingam, BHEL Trichy

Visit to Old age Home	Instrumentation & Control Engineering Association
Visit to Orphanage	Instrumentation & Control Engineering Association
Food for Needy	Instrumentation & Control Engineering Association
Clean and Green India	Instrumentation & Control Engineering Association

Continuing Education Programmes	
PROGRAMME	HELD AT
Workshop on “Computerized Diagnosis Via Medical Images Using Artificial Intelligence Techniques”	Kongu Engineering College, Erode.
IEEE sponsored workshop on “Artificial Neural Networks and its Applications”	Kalasalingam University, Krishnankoil.
Faculty Development Program on “Instrumentation & Automation”	Sethu Institute of Technology, Kariapatti.
Faculty Induction Program for freshers.	Sethu Institute of Technology, Kariapatti.
Faculty Development Program on “Process Control”	Kumaraguru college of Engineering, Coimbatore.
Technical Session on “How to start a Research Program”	Sethu Institute of Technology, Kariapatti.
Workshop on “Real Time Simulation using LabVIEW in Process Control”	Sethu Institute of Technology, Kariapatti.
Seminar on “Recent Trends In MEMS & Nano Technology”	Sethu Institute of Technology, Kariapatti.
Training program on “DCS & PLC Overview”	Sethu Institute of Technology, Kariapatti.
Workshop on “Non-Conventional Energy”	DMI College of Engineering, Aralvaimozhi.
Faculty Development Program on “LabVIEW based Digital Signal Processing”	Sri Sowdambika college of Engineering, Aruppukkotai.
Workshop on “Recent Trends in Industrial Instrumentation & its Applications”	Sethu Institute of Technology, Kariapatti.
Short term course on “Modern Pneumatics & Control – Theory & Practice”	NIT, Calicut.
Faculty Development Program on “Process Control and its Applications”	Sri Krishna College of Technology, Kovaipudhur.
Faculty Development Program on “Process Instrumentation & Control”	NIT, Trichy.
CPDT – State of the art technology followed in Industry	Sri Krishna College of Technology, Kovaipudhur.

Sixth Sense Technology	IIT Bombay
One Day Industrial Training	FCRI, Palakkad
One Week FDP on Logic & Distributed Control	SriRamakrishna Engineering College
Three Days FDP on Intelligent Control	Sri Krishna College of Technology, Kovaipudhur.
One week training on Virtual Labs	College of Engineering Pune
Level I Thermography Training	Southern Inspection Services, Chennai
Web conference on Application of Statistics in Biomedical Research	Sri Krishna College of Technology, Kovaipudhur.
Web conference on Robotics & Automation	Sri Krishna College of Technology, Kovaipudhur.
One day FDP on Robotics and Automation	CTS, Coimbatore
Web conference on Mathematical Modeling in Robotics	Sri Krishna College of Technology, Kovaipudhur.
Guest Lecture on Nuclear Power Generation	Sri Krishna College of Technology, Kovaipudhur.
Guest Lecture on Digital Signal Processing	Sri Krishna College of Technology, Kovaipudhur.
Seminar on Copyrights and Trademark	Sri Krishna College of Technology, Kovaipudhur.
FDP on Applications of Computational Fluid Dynamics in Process Industries	Sri Krishna College of Technology, Kovaipudhur.
Short Term Training Program on Medical Electronics	Sri Krishna College of Technology, Kovaipudhur. By TMI SYSTEMS, Bangalore
National Safety Week Rally	Besten Pumps, Coimbatore
Emerging Business Laws and its Ramifications	National Law School of India University, Radisson Blu, Coimbatore
Webinar on India First Leadership Talk Series - by Anand Mahendra	Sri Krishna College of Technology, Kovaipudhur.

Membership of Professional Bodies	
PROFESSIONAL BODIES	TYPE OF MEMBERSHIP
IAENG	Annual Member
ISA	Annual Member

Awards / Laurels	
AWARDS	ISSUED BY
Organizing Committee member World Conference on Applied Science, Engineering and Technology	IFERP
Outstanding contribution in reviewing	ELSEVIER - Future Generation Computer Systems

Online Courses Completed	
ONLINE COURSES	CERTIFIED BY
Industrial Instrumentation	NPTEL

Course materials prepared
Process Control
Sensors & Transducers
Biomedical Instrumentation
Industrial Instrumentation
Logic & Distributed Control Systems
System Identification & Adaptive Control
Communication Engineering
Control Engineering
Digital System Design
Microprocessors & Microcontrollers
Automobile & Aircraft Instrumentation
Powerplant Instrumentation & Control

Paper Publications (Conferences)	
TITLE	CONFERENCE
Ph Neutralisation Using Fuzzy Logic Controller	National Conference on Intelligent Computing & Automation Instruision 2k10
Identification And Model Based Control Implementation For A Hybrid Tank System	National Conference on Intelligent Computing in Communication and Automation (NCICCA'11)
Fuzzy Controller Implementation for an Industrial Deaerator System	National Conference on Industrial Technology (NCIT'13)
Fuzzy Implementation for Fire tube Boiler	National Conference on Industrial Technology (NCIT'13)
Adaptive Control Implementation for a Stirrer Tank Reactor Process	National Conference on Industrial Technology (NCIT'13)

Fuzzy Controller Implementation for a Deaerator System in power plant	National Conference on Recent Trends in Instrumentation and Control Technology (RCIT'13)
Model Predictive controller for Inter-thermal process	International Conference on Thermal Energy and Environment - INCOTEE 2011
System Identification and Predictive control implementation for a CSTR System	International Conference on Thermal Energy and Environment - INCOTEE 2011
System Identification and Performance Analysis using PID & Adaptive Control for a Hybrid Tank System	International Conference on 'Machine Intelligence Application to Power, Signal Processing, Communication and Control - MIPSCCON-2011
System Identification and Performance Analysis using IMC & Adaptive Control for a Hybrid Tank System	International Conference on Intelligent science & Technology - SUNIIST 2011
Implementation of Adaptive and Internal Model Controller for Interactive Heat Exchanger process	International Conference on Artificial Intelligence & Soft Computing - ICAISC 2011
Performance Analysis of Neural network and ANFIS in Brain MR Image Classification	International Conference on Artificial Intelligence & Soft Computing - ICAISC 2011
Model Identification and Adaptive Control Implementation for a CSTR Tank System	International Conference on Recent Advancements in Electrical, Electronics and Control Engineering - IConRAEeCE 2011
Model Identification & Fuzzy Controller Implementation for the Evaporator process in Sugar Industry	International Conference on Electrical Engineering and Computer Science - ICEECS 2012
Intelligent Control Implementation for the Temperature Process in Industrial Boiler	International Conference on Computational Intelligence - ICCI 2013
Model Reference Adaptive Control Implementation for a Stirrer Process	International Conference on Computational Intelligence - ICCI 2013
Fuzzified Control of Industrial Deaerator System in Power Plant	International Conference on Computational Intelligence - ICCI 2013
Identification and realtime Control of a Hybrid tank System through Virtual Instrumentation	International Conference on Green Computing Communication and Electrical Engineering - ICGCCEE 2014
Fractional Order Control and Comparative Analysis of a Hybrid System	International Conference on Intelligent Computing, Communication & Convergence - ICCV 2014
Model Identification Adaptive Control (MIAC) For The Evaporator Process In Sugar Industry	IEEE International Conference on Electronics and Communication Systems - ICECS 2016
Identification & FOPID Implementation For Sugar Industry Process	IEEE International Conference on Electronics and Communication Systems - ICECS 2016
Safe Propellant Loading in Pyrotechs Using Virtual Instrumentation	International Conference On Electrical, Electronics, Instrumentation and Computer Communications - EEICC – 2016
SRC For Mobile Room Heating System	International Conference On Electrical, Electronics, Instrumentation and Computer Communications - EEICC – 2016

Model reference adaptive control (MRAC) Implementation for an industrial pilot stirrer process	IEEE International conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI - 2017), Saveetha Engineering college, Chennai
Controlling of torque and flux for 3 phase induction machine drive system (IMDS) using fuzzy controller	IEEE International conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI - 2017), Saveetha Engineering college, Chennai

Paper Publications (Journals)	
TITLE	Journal
Model Identification And Model Reference Adaptive Control Implementation For A Hybrid Tank System	International Journal of Emerging Trends in Engineering and Development (IJETED)
Performance Analysis of Neural network and ANFIS in Brain MR Image Classification	Soft Computing Techniques In Vision Science
Secure Routing in Heterogeneous Wireless Sensor Networks with Intrusion Detection and a Differential Evolution based Thermal Aware Optimization Algorithms	International Journal of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering
Multicarrier Sinusoidal PWM Technique Based Analysis of Asymmetrical and Symmetrical 3 Φ Cascaded MLI	International Journal of Advanced Research in Computer and Communication Engineering
Fopid Implementation For Industrial Process	International Journal of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering
Self-Organizing Map Based Fault Detection and Isolation Scheme for Pneumatic Actuator	International Journal of Innovation and Applied Studies
Fractional Order Control and Comparative Analysis of a Hybrid System	Procedia Computer Science
Propellant Mixing and Loading in Pyrotechs using Virtual Instrumentation	International Journal of Control Theory and Applications
Split Range Control for Mobile Room Heating System	International Journal of Control Theory and Applications

Book Publications	
TITLE	Publisher
Identification and controller implementation for hybrid tank process	LAP-LAMBERT Academic Publishing
Controllers for Instrumentation	LAP-LAMBERT Academic Publishing

Patents Filed	
TITLE	Application Number
Hair Grabber System	296608
Kitchen Sink Drainer 1	297756
Kitchen Sink Drainer 2	297755
A Method and a Device for enabling enhanced identification and communication through Sign language between differently abled and normal persons	201841013055

INDUSTRY / ACADEMIC CONNECTS		
NAME	PURPOSE	INSTITUTION
Dr. Hasan Al-Marzouqi	Journal paper work	Petroleum Institute of Engineering - Abu Dhabi
Dr.S.Dharmalingam	Syllabus Revamping	BHEL, Trichy.
Dr. J.Prakash	Syllabus Revamping	MIT, Chennai.
Dr. N.Siva Kumaran	Syllabus Revamping	NIT, Trichy.
Dr. Srinivasan	Syllabus Revamping	NIT, Trichy.
Dr. Saravanan	Syllabus Revamping	NIT, Trichy.
Dr. T.K.Radha Krishnan	Syllabus Revamping	NIT, Trichy.
Mr.Amarnath Karthick	Syllabus Revamping	Embuzz Technology Pvt. Ltd, Madurai
Dr. Sudhir Agashe	Virtual Lab Training	COEP, Pune.
Mr.Madhan	Syllabus Revamping, Internships & Placements	AROBOT Technologies Pvt. Ltd
Ms.Soundharya	MOU	AROBOT Technologies Pvt. Ltd