# Sri Sai Ram Engineering College Department of Instrumentation and Control Engineering

A	Ion and Control Engineering
Name: Mr.K.MOHAN RAJ	
Designation:	Assistant Professor/Grade III
Qualification:	M.Tech
Area of Specialization:	Process control, Industrial Instrumentation, Power Plant Instrumentation
Experience:	Teaching- 7 Years
	Industry: 5 Years
Number of Workshops/ Conferences/ FDP Attended:	43
Publication:	Journal: National: 0 International: 13
	Conference: National: 0 International: 03
Research Guidance:	Guided 5 UG Projects till date
General:	IEEE Robotics and Automation Society - Student Chapter Advisor. ISTE- Life Time Member IEEE-Senior Member
Staff Achievement	Startup Company for Agriculture Sector - Skycatch Bots -MSME Registered

## Experience: Industry Experience :( 5-years) Thermal power plant projects

S.No	COMPANY	CLIENT	DESIGNATION	AREA OF WORKING	PERIOD OF WORKING
1.	Greenesol power system pvt ltd- Bangalore.	Jindal steel ltd,Tumkur	Instrumentation Engineer	Erection and commissioning	August 2011- June-2012
2.	Greenesol power system pvt ltd- Bangalore.	Madras Sugars pvt ltd- Tirukoilur.	Instrumentation Engineer	Erection and commissioning	June 2010 - August-2011
3.	Toyo-denky power system pvt ltd- Bangalore.	Hi-tech carbon- Chennai (17MW)-Tamil nadu.	Instrumentation Engineer	Erection and commissioning	December 2006- July 2007
4.	Greenesol power system pvt ltd- Bangalore	Grasim industries ltd-jodhpur (17MW)- Rajasthan	Instrumentation Engineer	Erection and commissioning	August 2005- December 2006
5.	Greenesol power system pvt ltd- Bangalore.	ISA power plant (10 MW)-Raipur Chhattisgarh	Instrumentation supervisor	Erection and commissioning	March 2005- August 2005
6.	Triveni Engineering and industries pvt ltd Bangalore.	Rajshree sugars and chemical ltd (22.6MW)- Villupuram	Instrumentation supervisor	Erection and commissioning	April 2004- March 2005

#### **Teaching Experience:**

S. No	Name of the Institution	Designation	Department	Period of
				Experience
1.	Bannari Amman Institute	Assistant Professor	Electronics and	2 Yrs (May 2014 -
	of Technology,		Instrumentation	May 2016)
	Sathyamangalam, Erode			
2.	Sri Sairam Engineering	Assistant	Instrumentation	4 years & 11
	College, West	Professor/Grade III	and Control	Months (Till date)
	Tambaram, Chennai		Engineering	

### Workshop Attended:

- 1. Attended five days FDP on Process Modelling & Control at Sairam Engineering College
- 2. Two days FDP on Outcome Based Education Conducted by IQAC of Sri Sairam Engineering College
- 3. Five days workshop on Distributed Control systems Fundamentals and Engineering with PLC conducted by Sri Sairam Engineering College-Chennai.
- 4. Short Term Training Programme on "PLC, SCADA, Industrial Automation and Control (Hands on) Conducted by IIITDM, Kancheepuram. (27th and 28th September 2017)
- 5. Workshop on Trends in Control and Instrumentation for Power plant-A Research Perspective conducted by B.S Abdur Rahman University. (27th and 28th September 2017)
- 6. Potential research avenues and future opportunities in electrical and instrumentation engineering conducted by Karpagam College of engineering-Coimbatore.
- 7. Pre-Conference Workshop on Conventional & Modern techniques for controller design conducted by Karunya University Coimbatore.
- 8. Two Week ISTE Workshop on Control System conducted by Indian Institute of technology Kharagpur.
- 9. Online Workshop on esim Conducted by VIT Chennai on 14th to 16th May 2020.

## **FDP** Attended:

- 1. FDP on Discrete Time Signal Processing conducted by Bannari Amman Institute of Technology- Sathyamangalam- Erode. (4<sup>th</sup> to 10<sup>th</sup> Dec 2017)
- 2. FDP on Logic and Distributed Control System conducted by Sri Ramakrishna Engineering College- Coimbatore (5<sup>th</sup> to 11<sup>th</sup> June 2017)
- 3. FDP on Methodologies & practices for profitable Research through patents & IPR conducted by Sri Sairam Engineering College-Chennai. (4th Jan 2019)
- Six days FDP on Robotics conducted by Sri Sairam Engineering College-Chennai. (13th – 18th May 2019)

- Two week FDP- Recent Innovations in Electrical, Electronics, Instrumentation, Automation & Teaching Pedagogy. Conducted by Sri Sairam Engineering College on 18<sup>th</sup> to 30<sup>th</sup> May 2020.
- 6. FDP on Internet of Things Conducted by NITTR Chennai on 15<sup>th</sup> to 19<sup>th</sup> April 2020.
- 7. Get Ready for AI with MATLAB and Simulink conducted by Sri Sairam Engineering College, on 18<sup>th</sup> to 20<sup>th</sup> June 2020.
- FDP on Recent Trends in Electrical Engineering Conducted by Karpaga Vinayagar College of Engineering & Technology on 25<sup>th</sup> to 27<sup>th</sup> July 2020.
- 9. STTP on Recent Trends in Computational Intelligence for Healthcare Monitoring systems conducted by Bannari Amman Institute of Technology, Sathyamangalam on 12<sup>th</sup> to 17<sup>th</sup> October 2020.
- 10. ATAL FDP on Augmented Reality (AR)/ Virtual Reality (VR) Conducted by Guru Nanak Dev Engineering College, Ludhiana on 23<sup>rd</sup> to 27<sup>th</sup> November 2020.
- 11. TEQIP-III Sponsored Multidisciplinary Research Innovation in Engineering, Science and Technology for Sustainable Development conducted by BIPIN TRIPATHI KUMAON INSTITUTE of TECHNOLOGY DWARAHAT ALMORA on 26<sup>th</sup> October to 7<sup>th</sup> November 2020.
- 12. ATAL FDP on Internet of Things Conducted by Kongu Engineering College, Erode, on 21<sup>st</sup> to 25<sup>th</sup> Dec 2020.
- 13. ATAL FDP on Electrical & Computer Engineering conducted by National Institute of Technology Raipur on 4<sup>th</sup> Jan to 8<sup>th</sup> Jan 2021.
- 14. NAAC Sponsored Two days National Level Webinar on Quality Sustenance through online mode of Education by IQAC, Hindusthan College of Engineering and Technology on 8/4/2021 to 9/4/2021.
- 15. Global Warming & Impacts Of Power Electronics Towards Green Technology by SRM Valliammai Engineering College on 24/5/2021 to 28/5/2021.
- 16. Online Six Day FDTP on "EE8351-Digital Logic Circuits in Bannari Amman Institute of Technology 24/5/2021 to 29/5/2021.
- 17. FDP Program on Intellectual Property rights NPTEL in Jan 2021 to April 2021.
- ATAL Online FDP on "Introduction to Software Robots and Automation, Bharathiar Centenary Memorial Government Womens Polytechnic College on 6/7/2021 to 11/7/2021.
- 19. AICTE Organized 5 Days online FDP on Inculcating Universal Human Values in Technical Education Online by AICTE, 2/8/2021 to 6/8/2021.
- 20.7-Days Hands on Training on "Advanced Industrial Automation, Sri Sairam Engineering College Chennai on 25/10/21 to 1/11/21.
- 21. International workshop oin Natural Insprired Computing applied to engineering in Sri Sairam Engineering College Chennai on 23/7/2021 to 26/7/2021.
- 22. Three day Online Faculty Development Program on "Embedded System"
- 23. Design Methodologies using Intel FPGA" organized by the Department of Electronics and Communication Engineering, Velammal College of Engineering and Technology in association with Intel Technology India Pvt ltd on 15/12/2021 to 17/12/2021

- 24. Module 7\_Creative problem Solving, Innovation and Meaningful R&D, NITTT on Sept 2021.
- 25. Six Days Faculty Industrial Training Program, IPL Products, Thirumudivakkam, 21/2/2022 to 26/2/2022

#### Seminar Attended:

- 1. National Seminar on Didactic Seminar on Cadence OrCAD PSPICE and OrCAD PCB conducted by PSG college of Technology Coimbatore.
- 2. National Seminar on Robotic Process Automation: Basics and Beyond conducted by ICT Academy on 10<sup>th</sup> April 2020.
- 3. National Seminar on THE FUTURE IS HERE NOW conducted by ICT Academy on 27<sup>th</sup> April to 30<sup>th</sup> April 2020.
- 4. National Seminar on The Future of Education, Employment & Entrepreneurship conducted by ICT Academy on 4<sup>th</sup> May to 13<sup>th</sup> May 2020.
- 5. MHRD IIC online session Entrepreneurship Development: Entrepreneurship, Business Idea, and Business Model Canvas on 5<sup>th</sup> May 2020.
- MHRD IIC online session Design Thinking and Innovation: The Double Diamond Process: Entrepreneurship, Business Idea, and Business Model Canvas on 6<sup>th</sup> May 2020.
- 7. MHRD IIC online session IPR and Technology Transfer: Intellectual Property (IP) Management at Early Stage of Innovation and Start-ups on 7<sup>th</sup> May 2020.
- 8. MHRD IIC online session Entrepreneurship Development: Understanding Angel and Venture Capital Funding on 8<sup>th</sup> May 2020.
- 9. MHRD IIC online session Legal and Ethical Steps Productive Entrepreneurship and Startup on 12<sup>th</sup> May 2020.
- 10. MHRD IIC online session Entrepreneurship Development: Innovating Self- Screen and Identify right opportunities on 13<sup>th</sup> May 2020.
- 11. MHRD IIC online session Entrepreneurship Development: Understanding Role and Application of Marketing Research at Idea to Start-Up Stage - Foundation Level on 14<sup>th</sup> May 2020.
- 12. MHRD IIC online session Entrepreneurship Development: Innovation Risk Diagnostic: Product Innovation Rubric (PIR) on 15<sup>th</sup> May 2020.
- 13. MHRD IIC online session Entrepreneurship Development: Use of Market Data and Application of Marketing Research Tools and Methodology - Advance Level on 20<sup>th</sup> May 2020.
- 14. MHRD IIC online session Entrepreneurship Development: Frugal Innovation and Social Entrepreneurship on 21<sup>st</sup> May 2020.
- 15. MHRD IIC online session Entrepreneurship Development: Interaction with Student Innovators and Entrepreneurs Emerged from Smart India Hackathon (SIH) on 22<sup>nd</sup> May 2020.

- 16.5 weeks Webinar series in Recent Trends in Sensors and Automation Conducted by Sri Ramakrishna Engineering College on 6<sup>th</sup> June to 4<sup>th</sup> July 2020.
- 17. Webinar on R & D Proposal Writing for Faculties Conduccted by Sri Sairam Engineering College on 12<sup>th</sup> June 2020.
- 18. Two Days National Level Webinar on Quality Sustenance through online mode of Education Conducted by Hindusthan College of Engineering & Technology on 8<sup>th</sup> to 9<sup>th</sup> April 2021.

#### **NPTEL Online Certification Course:**

- 1. NPTEL Online Certification course on Emotional Intelligence.
- 2. NPTEL Online Certification course on Introduction to Research.

#### **Conference Attended:**

- 1. **K. Mohan raj,** "Online Identification using Internal Model Control", IEEE sponsored Online International Conference on Green Engineering and Technology IC-GET 2015 at Karpagam College of Engineering, Coimbatore.
- 2. **K. Mohan raj,** "IoT based smart warehouse monitoring system", 6th International Conference on Chip, Circuitry, Current, Coding, and Combustion & Composites 2018 at Sri Sairam college of Engineering, Bengaluru, Karnataka, 28th and 29th Nov 2018.
- **3.** K.Mohanraj, "Voice-O-Mata Using IOT", First International Conference on Circuits, Signals, Systems and Securities ICCSSS 2020- at Bannari Amman Institute of Technology, Coimbatore on 11<sup>th</sup> and 12<sup>th</sup> December 2020.
- 4. **K.Mohanraj**, Machine Learning based Estimation of Room Occupancy using Nonintrusive Sensors, 2022 International Conference on Communication, Computing and IoT on 10<sup>th</sup> to 11<sup>th</sup> March 2022.
- 5. **K.Mohanraj**, Cloud-O-Col for PLCS Using IoT, 2021 4th International Conference on Computing and Communications Technologies (ICCCT), on 16-17 Dec. 2021.

#### Publication: 17 International Journal:

- 1. Modeling and development of laboratory-based water treatment plant. Journal of chemical and pharmaceutical research 2014, 6(2):410-415 ISSN: 0975-7384 CODEN (USA): JCPRC5.
- 2. ANFIS Based Low-Cost Blood Serum Analyzer. International Journal of Scientific & Engineering Research, Volume 5, Issue 9, September-2014 783 ISSN 2229-5518.
- 3. Nonlinear Identification of Cascaded Two Tank System. International Journal Of Innovative Research in Electrical, Electronics, Instrumentation And Control Engineering, Vol. 2, issue 10, October 2014 ISSN 2321-2004.

- 4. Performance Analysis of Sliding Mode Control method with a PID Controller for a Nonlinear system, International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, Vol. 3, Issue 5, May 2015, ISSN:2321-2004.
- 5. IoT based patient Monitoring system using raspberry Pi3 and LabVIEW, Pakistan Journal of Biotechnology, Vol-14, issue-3, October-2017, ISSN:1812-1837.
- 6. Aircraft Tracking Using Automatic Dependence Surveillance Broadcast, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 5 Issue XI, November 2017.
- 7. Embedded Dry Block Calibrator for Intermediate Temperature, International Journal for Research in Engineering Application & Management (IJREAM) ISSN : 2454-9150 Vol-05, Issue-01, April 2019.
- 8. Smart Warehouse Monitoring Using IoT, International Journal of Engineering and Advanced Technology (IJEAT) Volume-8, Issue-6, August 2019.
- 9. FPGA implementation of smart water quality monitoring system, International Journal of Innovative Technology and Exploring Engineering- Volume-8, Issue 11, September 2019.
- 10. Implementation of GUI for class attendance using face detection and recognition system, International Journal of Innovative Technology and Exploring Engineering, Volume-9, Issue-1, November 2019.
- 11. Intelligent Controller Based Approach for Direct Torque Control of a Three Phase Induction Motor ISSN: 2394-3114 Vol 40 issue 3 (s1) Feb 2020.
- 12. Optimal process characteristics of melting of Polyisoprene, Materials Today: Proceedings, Jan 2021.
- 13. Voice-O-Mata Using IoT IOP Conference Series: Materials Science and Engineering- Vol 1084 March 2021.
- 14. Cloud-O-Col for PLCS Using IoT, Proceedings of the 2021 4th International Conference on Computing and Communications Technologies, ICCCT 2021, 2021, pp. 309–312.
- 15. Machine Learning based Estimation of Room Occupancy Using Non-Intrusive Sensors, 2022 International Conference on Communication, Computing and Internet of Things, IC3IoT 2022 Proceedings, 2022.
- 16. Turbidity Measurement by Alum Dosage Addition in Water Treatment Plant, Journal of Coastal life medicine, Vol-10,No-3, 102-108,2022.
- 17. Artificial Neural Network-Based Tic-Tac-Toe Game, Proceedings of International Conference on Communication and Computational Technologies ICCCT 2022 on 27<sup>th</sup> Sept 2022. ISBN 978-981-19-3950-1 ISBN 978-981-19-3951-8 (eBook).

## **Patent Details:**

Title of the Invention	Application Number	Date of Filing	Publication Date
Hybrid Tricycle With To And Fro Action of Steering Mechanism	202041019166A	05/05/2020	05/06/2020