



St. Joseph's Institute of Technology

St. Joseph's Group of Institutions

OMR, Chennai - 119



Department of Electronics and Communication Engineering
(Accredited by NBA)

FACULTY DETAILS

Staff Name:	Dr. C. GNANA KOUSALYA
Designation:	Professor
Date of Birth:	21.06.1972
Educational Qualification:	M.E., Ph.D
Area of Interest:	Digital Signal Processing, Communication Theory
Years of Experience:	23 Years 6 Months
Area of Research:	Wireless Sensor Network (WSN)
No. of Students Project Guided	68
Supervisor	Anna University, Chennai.
FDP & Workshop Funding	<ul style="list-style-type: none">• Sensor and its Application in Navigation System in Marine and Defence Environment funded by AICTE organized by ATAL at a cost of Rs.93,000.• Biological Effects Of Electromagnetic Fields And Radiation funded by Board Of Research In Nuclear Science (BRNS) at a cost of Rs.40,000.• Engineering In Diabetology funded by Indian Council Of Medical Research (DHR ICMR) at a cost of Rs.50,000.
R & D Activities	<ul style="list-style-type: none">• Firmware development for 4 Axle Cleaning Robot funded by Pantech Pro Labs at a cost of Rs.2,06,750.• Mining Haulage Tracking and Monitoring funded by AROBOT at a cost of Rs 3,50,000.• Design of Fool Proof Centralized Voting Machine funded by CDCE AUTOMATION at a cost of Rs,2,80,000.
Publications Details:	Journal Publications: <ul style="list-style-type: none">• Utilization of Fish Excrete for Plant Growth Using SVM – Proceedings of Algorithms for Intelligent Systems- Springer Nature Book Series.• Digital Image Falsification Detection System for Effective Data Communication- International Journal of Engineering

and Advanced Technology (IJEAT).

- Robot for Under Water Monitoring- International Journal of Engineering and Advanced Technology (IJEAT).
- Non Contact Heart Rate Monitoring using Facial Video- International Journal of Engineering and Advanced Technology (IJEAT).
- Design Modeling and Fabrication of Human-Humanoid Robot Communication- Pakistan Journal of Biotechnology.
- An Energy Efficient Key Management Scheme For Mobile Wireless Sensor Networks- International Journal of Advanced Technology in Engineering and Science.
- Genetic Algorithm based Optimization of Single Node in Reformed-Digital Micro Fluidic Biochip” Indian Journal of Science and Technology Vol 8(29), pg 1-8, ISSN (Print) : 0974-6846 ISSN (Online) : 0974-5645.
- Energy efficient geographical key management scheme for authentication in mobile wireless sensor networks, The Journal of Mobile Communication, Computation and Information Springer US, pp 1–11, Vol 23 (ISSN: 1022-0038.).
- Secured Transmission of Data in Mobile Wireless Sensor Networks, International Journal of Advanced Engineering Technology Vol. VII, ISSN 0976-3945.
- Secure and Energy-Efficient Traffic-Aware Key Management Scheme for Wireless Sensor Network- International Journal of Wireless Information Networks.
- A Traffic-Aware Key Management Architecture for Reducing Energy Consumption in Wireless Sensor Networks, **IEEE Proceedings**.

Conference:

- Utilization of Fish Excrete for Plant Growth Using SVM- Springer International Conference on Data Intelligence and Cognitive Informative (ICDICI-2020).
- Utilization of fish excreted for plant growth using SVM-6 th International Conference on Electrical Energy Systems (ICEES 20).
- Non Invasive Heart Rate Monitoring Using Facial Images- National Conference on Recent Advances in On- Board Ship Automation (RAOBSA 2019).
- Versatile Insole Monitoring System- National Conference

	<p>on Recent Advances in On- Board Ship Automation (RAOBSA 2019).</p> <ul style="list-style-type: none"> • Monitoring of water quality in aquaculture using IOT- International conference on innovations and research in marine electrical and electronics engineering. • Under water Robotics- International conference on innovations and research in marine electrical and electronics engineering. • Design modeling and fabrication of humanoid robot communication-2017 International conference on intelligent computing and control. • Image Copy-Move Forgery Detection Based on SLIC Segmentation- International Conference on Recent Trends in Engineering and Technology. • FPGA Prototyping of video stabilization for Micro Aerial Vehicles-2nd International conference on recent trends in engineering & technology. • Fool Proof Centralized Voting Machine Using Automation Systems-2nd International conference on recent trends in engineering & technology. • A Traffic-Aware Key Management (TKM) Scheme for Wireless Sensor Networks- 2009 IEEE International Advance Computing Conference, IEEE Conference. <p>Patent:</p> <ul style="list-style-type: none"> • Gas Lighter With Leakage And Level Monitoring System. Official Journal Of The Patent Office (Filed No. 202041014653).
<p>FDP & Workshop Attended Details:</p>	<ul style="list-style-type: none"> • Faculty Development Program on “Information Management and Coordination Department “from 21/10/19 to 25/10/19 at NITTR, Chandigarh. • Faculty Development Program on “Soft Computing Techniques and its Application “from 15/11/19 to 28/11/19 at Anand Institute of Higher Technology, Chennai. (AICTE SPONSORED) • Faculty Development Program on “Introduction to Internet of Things “JUL-OCT 2019 1 ½ Weeks at NPTEL - AICTE • Faculty Development Program on “Introduction to Internet of Things “27-4-2020 to 1-5-2020 at AICTE & ATAL Academy, Jaipur

- Faculty Development Program on “Python 3.4.3 “10-5-2020 to 14-5-2020 at Sri Krishna college of Technology, Coimbatore (**Spoken Tutorial, IIT Bombay**)
- Faculty Development Program on “Data Analysis & Visualisation COVID 19 using Python “7-5-2020 at Jerusalem College of Engineering, Chennai.
- Faculty Development Program on “Role of IOT, Embedded, Electric Vehicle, Power Electronics Converters for Smart World “18-5-2020 to 22-5-2020 at St. Joseph’s college of Engineering, Chennai.
- Faculty Development Program on “Embedded and IOT BOOTCAMP “27-5-2020 to 29-5-2020 at Mohamed Sathak A J College of Engineering, Chennai
- Faculty Development Program on “SCILAB “25-05-2020 to 27-05-2020 at St. Joseph’s Institute of Technology, Chennai. **Spoken Tutorial, IIT Bombay.**
- Workshop on “Introduction to Animation, Creation of Animated objects, Creative of Interaction Animation and Evaluation “14-5-2020 to 18-5-2020 at Universal Teachers Academy, Puducherry.
- Faculty Development Program on “Emerging Trends in Embedded Systems “02/07/18 to 07/07/18 at St. Joseph’s College of Engineering, Chennai. (AICTE-ISTE SPONSORED)
- Faculty Development Program on “IOT Using Arduino and Raspberry Pi “26/11/18 to 27/11/18 at SRM, Chennai.
- Faculty Development Program on “Machine Learning “ 1 Weeks at **NPTEL -AICTE**
- Faculty Development Program on “Deep Learning “ 1 ½ Weeks at **NPTEL -AICTE**
- Faculty Development Program on “Introduction to Industry 4.0 and Industrial IOT 1 ½ Weeks at **NPTEL -AICTE**
- Faculty Development Program on “Industry 4.0 (Smart Manufacturing) “19/11/18 to 20/11/18 at St. Joseph’s Institute of Technology, Chennai. (MSME SPONSORED).
- Faculty Development Program on “Ethical Hacking and Cyber Security “22/2/19 to 23/2/19 at AMET , Chennai.
- Faculty Development Program on “EC6703 Embedded & Real Time Systems “23/05/2018 To 30/05/2018 at Jeppiar Engineering College, Chennai. (Anna University Sponsored)

	<ul style="list-style-type: none">• Faculty Development Program on “Emotional Intelligence “14/5/2018 to 15/5/2018 at Anna adarsh College for Women, Chennai
Professional Membership:	IEEE,ISTE, IETE