



Sahrdaya College of Engineering & Technology (Autonomous)

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DR. G.R.GNANA KING

General Details

Name	DR. G.R.GNANA KING	Gender	Male
AICTE ID		Staff Id	FEC1614
Joining Date	01/12/2016	Date of Birth	29/09/1985
Blood Group	B+	Department	Electronics & Communication Engineering
Category	1	Designation	Professor
Institution Last Worked	Kathir College of Engineering, Coimbatore	Contract Type	Permanent
Ktu Id	KTU-F30408	PEN No	

Personal Details

Father Name	Rev.C. Gnana Dhasan	Marital Status	Married
Mother Name	R. Royal Mary	Spouse Name	Dr. J H Jensha Haennah
Nationality	INDIAN		

Contact Details

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Present Address	STAFF QUARTERS SAHRDAYA COLLEGE OF ENGINEERING AND TECHNOLOGY KODAKARA Kerala Thrissur 680684	Permanent Address	18-65/2 , Royal Cottage Chettivilai Kallukootam Tamil Nadu Kanyakumari 629802

Qualifications						
S.No	Degree	Discipline / Stream	University / Institution	Percentage / CGPA	Year of Passing	Special Remarks
1	Ph.D.	INFORMATION AND COMMUNICATION ENGINEERING	ANNA UNIVERSITY	10.00	2016	
2	ME(Engg/ Sciences)	APPLIED ELECTRONICS	ANNA UNIVERSITY	7.60	2009	
3	BE(Engineering)	ECE	ANNA UNIVERSITY	6.90	2007	

Experiences							
S.No	Title	Name of Organization/Institution	From Date	To Date	Designation	Nature of Employment	Nature of Duty
1	Assistant Professor	CSI Institute of Technology	2009-06-01	2015-05-31	Assistant Professor		
2	Associate Professor	Kathir College of Engineering	2015-06-01	2016-11-30	Associate Professor		
3	Associate Professor	Sahrdaya College of Engineering and Technology	2016-12-01	2022-07-27	Associate Professor		
4	Professor	Sahrdaya College of Engineering and Technology	2022-07-27		Professor		

Subjects Engaged / Engaging					
S.No	Academic Year	Batch	Semester	Subject	Pass %
1	2024-2025	MEC 2024	IIInd Semester	242EEC006 - PRODUCT DESIGN AND QUALITY MANAGEMENT	-
2	2024-2025	MEC 2024	Ist semester	241RGE100 - RESEARCH METHODOLOGY AND IPR	-
3	2024-2025	ECE 2K21	VIIIth Semester	ADDON - Add On Course	-
4	2024-2025	ECE 2K22	VIth Semester	ECT308 - COMPREHENSIVE COURSE WORK	-
5	2024-2025	ECE 2K21	VIIIth Semester	ECT434 - SECURE COMMUNICATION	-
6	2024-2025	ECE 2K22	Vth Semester	ECL333 - DIGITAL SIGNAL PROCESSING LABORATORY	97
7	2024-2025	ECE 2K22	Vth Semester	ECT303 - DIGITAL SIGNAL PROCESSING	87
8	2023-2024	ECE 2K22	IVth Semester	AI - AI Training	-
9	2023-2024	ECE 2K22	IVth Semester	MCN202 - CONSTITUTION OF INDIA	79
10	2023-2024	ECE 2K21	VIth Semester	SGA - SGA-B.Tech	-
11	2023-2024	MEC 2023	IIInd Semester	222LEC100 - Embedded OS and RTOS Lab	-
12	2023-2024	MEC 2023	IIInd Semester	222EEC006 - Product design quality and management	-

Publications							
S.No	Description	Title of The Paper/Patent	Category	Patent No	Indexing	Academic Year	Period
1	Journal of Intelligent and Fuzzy System	‘Combined Unet and CNN Image Classification Model for COVID Disease Detection Using CXR/CT Imaging	Journal Papers		SCIE	2024-2025	

2	Biomedical Signal Processing and Control	Automated detection of pancreatic cancer with segmentation and classification using fusion of UNET and CNN through spider monkey optimization	Journal Papers		SCI	2024-2025	
3	International Conference on Data Science and Network Security (ICDSNS), Tiptur, India, 2024, pp. 1-7, doi: 10.1109/ICDSNS62112.2024.10690953.	Deep Learning for Pothole Detection: Exploring YOLO V8 Algorithm's Performance in Pavement Detection	International Conferences		SCOPUS	2024-2025	
4	Multimedia Systems	Computer-aided diagnosis for early detection and staging of human pancreatic tumors using an optimized 3D CNN on computed tomography	Journal Papers		SCI	2023-2024	
5	Indian Patent	AN IOT BASED COVID PATIENTS HEALTH MONITORING SYSTEM	Patent Awarded			2023-2024	
6	In: Ranganathan, G., EL Alloui, Y., Piramuthu, S. (eds) Soft Computing for Security Applications. ICSCS 2023. Advances in Intelligent Systems and Computing, vol 1449. Springer, Singapore. https://doi.org/10.1007/978-981-99-3608-3_8	Escasalus—ML-Based Food Quality Checker	International Conferences		SCOPUS	2023-2024	
7	Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 01-10, doi: 10.1109/ICCEBS58601.2023.10449138. (IEEE Scopus Indexed)	"State-of-Art Techniques for effective Segmentation and Classification of Pancreatic Cancer Using Deep Learning: A Review	International Conferences		SCOPUS	2023-2024	
8	2nd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT), Bengaluru, India, 2024, pp. 221-228, doi: 10.1109/IDCIoT59759.2024.10467934	Development of Innovative Algorithm for Sound Detection Based on FFT and Goertzel Algorithms	International Conferences		SCOPUS	2023-2024	
9	published a book entitled“ Fundamentals of Digital Image Processing” by notion press. ISBN: 979-888815803-6.		Book	979-888815803-6		2023-2024	

10	Published a book chapter entitled “ Intelligent 5G Networks and Augmented Virtual Reality in Smart Transportation” in the book “Artificial Intelligence in Cyber Physical Systems Principles and Applications” with ISBN 9781032164830, February 23, 2023 by CRC Press. https://www.routledge.com/Artificial-Intelligence-in-Cyber-Physical-Systems-Principles-and-Applications/Sagar-Nand-Kumar-Das-Sahana/p/book/9781032164830		Book Chapters		SCOPUS	2023-2024	
11	Published a book chapter entitled “ Machine learning based devices for pregnant women” in the book “Predicting Pregnancy Complications Through Artificial Intelligence and Machine Learning” with ISBN13: 9781668489741 ISBN10: 1668489740 EISBN13: 9781668489765, June, 2023. DOI: 10.4018/979-8-3693-1718-1.ch011 https://www.igi-global.com/chapter/machine-learning-based-devices-for-pregnant-women/332216 Chapter 11		Book Chapters		SCOPUS	2023-2024	
12	Third International Conference on Sustainable Expert Systems . Lecture Notes in Networks and Systems	Model-Based Design for Mispas CountX Using FPGA	Journal Papers		SCOPUS	2022-2023	
13	Wireless Pers Commun	Novel MRI and PET Image Fusion in the NSST Domain Using YUV Color Space Based on Convolutional Neural Networks	Journal Papers		SCI	2022-2023	
14	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	Brain tumour classification: a comprehensive systematic review on various constraints	Journal Papers		SCI	2022-2023	
15	Front. Med	Prediction of the COVID disease using lung CT images by Deep Learning algorithm: DETS-optimized Resnet 101 classifier	Journal Papers		SCIE	2022-2023	

16	6th International Conference on Computational Vision and Bio Inspired Computing (ICCVBIC 2022) organized by RVS Technical Campus, Coimbatore, Tamil Nadu, India held on 18-19, November 2022. ISSN: 2194-5357 (Springer)	Detection of Pancreatic Tumor from Computer Tomography Images using 3D Convolutional Neural Network	International Conferences		SCOPUS	2022-2023	
17	3rd International Conference on Soft Computing for Security Applications ICSCS 2023 organized by Dhirajlal Gandhi College of Technology, Salem, Tamil Nadu, India held on 17-18, April 2023. (Springer)	ESCASALUS-ML based Food Quality Checker	International Conferences		SCOPUS	2022-2023	
18	3rd International Conference on Soft Computing for Security Applications ICSCS 2023 organized by Dhirajlal Gandhi College of Technology, Salem, Tamil Nadu, India held on 17-18, April 2023. (Springer)	HELPER - Automatic Load Carrying Robot	International Conferences		SCOPUS	2022-2023	
19	Soft Computing for Security Applications. ICSCS 2023. Advances in Intelligent Systems and Computing, vol 1449. Springer, Singapore. https://doi.org/10.1007/978-981-99-3608-3_48	HELPER—Automatic Load-Carrying Robot	International Conferences		SCOPUS	2022-2023	
20	Advances in Distributed Computing and Machine Learning. Lecture Notes in Networks and Systems	Analysis of MRI and SPECT Image Fusion in the Wavelet Domain for Brain Tumor Detection	Journal Papers		SCOPUS	2021-2022	
21	INTERNATIONAL JOURNAL OF ELECTRONICS AND TELECOMMUNICATIONS	Comparative Analysis and Fusion of MRI and PET Images based on Wavelets for Clinical Diagnosis	Journal Papers		SCOPUS	2021-2022	
22	Indian Patent	Modified random Forest Algorithm for the diagnosis of Alzheimer disease	Patent Files			2021-2022	
23	International Conference on Advanced Computing & Communication Systems	Zebra Line Detection And Speed Control System Using Raspberry Pi	International Conferences		SCOPUS	2021-2022	
24	International Conference on Advanced Computing & Communication Systems	An Approach For Generalized Pedestrian Motions At Crosswalks	International Conferences			2021-2022	
25	3rd International Conference on Sustainable Expert Systems (ICSES-2022) organized by Tribhuvan University, Nepal held on 9-10, September 2022	Model Based Design for MISPA Countx using FPGA	International Conferences			2021-2022	

26	Intelligent Systems ,Christ University, Bangalore,held online during September 05-06, 2022	Real Time Operated Medical Assistive Robot	International Conferences			2021-2022	
27	4th International Conference on Communication, Computing and Electronics Systems (ICCCEs - 2022) organized by PPG Institute of Technology, Coimbatore, India held on 15-16, September 2022.ISSN: 1876-1100 (Springer)	A CNN Based Underage Driver Detection System	International Conferences		SCOPUS	2021-2022	
28	published a book chapter entitled“ Technical Assessment of Various Image Stitching Techniques: A Deep Learning Approach” , Handbook of Deep Learning in Biomedical Engineering and Health Informatics http://www.appleacademicpress.com/handbook-of-deep-learning-in-biomedical-engineering-and-health-informatics-/9781771889988		Book Chapters			2021-2022	
29	Published a book chapter entitled “Medical Tourism and Internet of Things” in E-ISBN Book “Big Data Analytics for Business Intelligence: Descriptive Case Studies on Smart Tourism in India” . Chapter Author in book publication with E-ISBN :978-81-950884-0-9		Book Chapters	E-ISBN :978-81-950884-0-9	SCOPUS	2021-2022	
30	International Journal of Creative Research Thoughts	“Development of Embedded Tether Interface Modem	Journal Papers		SCOPUS	2020-2021	
31	International Journal of Mechanical and Production Engineering Research and Development	Human Detection Robot in Flood	Journal Papers			2020-2021	
32	International Journal of Mechanical and Production Engineering Research and Development	Refilater-3D Printing Filament Extruder	Journal Papers			2020-2021	
33	Solid State Technology	Two wire Tether Interface Modem for Monitoring Underwater Pipeline Infrastructure	Journal Papers			2020-2021	
34	7th International Conference on Advanced Computing and Communication Systems (ICACCS)	Zebra Line Detection And Speed Control System Using Raspberry Pi	Conferences Proceeding			2020-2021	
35	7th International Conference on Advanced Computing and Communication Systems (ICACCS)	A Review on Glucose Monitoring Using Enabling Technologies of Internet of Things	International Conferences			2020-2021	

36	7th International Conference on Advanced Computing and Communication Systems (ICACCS)	A Review on Object Detection Algorithms for Ship Detection	International Conferences			2020-2021	
37	International Journal of Recent Technology and Engineering (IJRTE)	Wireless Speed Control of Vehicles with Detection of Person & Zebra Crossing	Journal Papers			2020-2021	
38	Smart Technologies, Communication and Robotics (STCR)	Fusion of Multimodalit y Medical Images A Review	Journal Papers			2020-2021	
39	International conference on Technological Convergence in Engineering, Energy and Sustainability	“Human detection Robot in Flood	International Conferences			2020-2021	
40	International conference on Technological Convergence in Engineering,Energy and Sustainability	“Refilater-3D Printing Filament Extruder	International Conferences			2020-2021	
41	International Conference on Advanced Computing & Communication Systems	A Review on Object Detection Algorithms for Ship Detection	International Conferences			2020-2021	
42	International Conference on Advanced Computing & Communication Systems	A Review on Glucose Monitoring Using Enabling Technologies of Internet of Things	International Conferences			2020-2021	
43	International Conference on Smart Technologies, Communication and Robotics	Fusion of Multimodalit y Medical Images	International Conferences			2020-2021	

Programs Coordinated

S.No	Description	Category	Academic Year
1	APJAKTU Sponsored five day FDP	FDP	2021-2022
2	AICTE Sponsored six day STTP	STTP Co-ord	2021-2022
3	Conducted MATLAB ADDON course on March 2017 at Sahrdya College of Engineering and Technology	Other Programs	2020-2021

Programs Attended

S.No	Description	Category	Academic Year	Period
1	DEMYSTIFYING AI AND DATA SCIENCE	FDP	2024-2025	
2	Navigating the Digital Landscape: Next-Gen Communication techniques for Teaching Pedagogy and Research Writing	FDP	2024-2025	
3	Smart Farming: Role of Technology in millets Production	FDP	2024-2025	
4	Introduction to Data Science	STTP	2024-2025	
5	Introduction to Artificial Intelligence	STTP	2024-2025	
6	Introduction to deep learning	STTP	2024-2025	
7	Introduction to Robotic Process Automation	STTP	2024-2025	
8	AI for future workforce	FDP	2023-2024	
9	Mentor Mentee relationship and Academic Student Mentoring	FDP	2023-2024	

10	Patent Drafting for Beginners	FDP	2023-2024	
11	Applications of Quantum Computing in Digital Design and Implementation	FDP	2023-2024	
12	Research Challenges in 5G/6G Wireless Communication and Applications	FDP	2022-2023	
13	Project Based Learning - Basics to Implementation	FDP	2022-2023	
14	Research Innovation Network(RINK)-Research translation and commercialisation Bootcamp	STTP	2022-2023	
15	the Part 1 of the online UHV Refresher 1	FDP	2021-2022	
16	AI and ML for Intelligent Applications Using Python and MATLAB	FDP	2021-2022	
17	Inculcating Universal Human Values in Technical Education	FDP	2021-2022	
18	Object Identification and Image Intelligence a Practical Approach"	FDP	2021-2022	
19	Deep Learning for Signal Processing	FDP	2020-2021	
20	Artificial Intelligence	FDP	2020-2021	
21	Artificial Intelligence	FDP	2020-2021	
22	Artificial Intelligence	FDP	2020-2021	
23	Artificial Intelligence	FDP	2020-2021	
24	FUNDING PROJECTS, CONSULTANCIES AND BOOK WRITING	Seminar	2020-2021	
25	A Novel Focus For Segmentation Chained with property extraction and classification of Branch retinal Artery occulso-an ophthalmic Examinatio	Seminar	2020-2021	
26	FUNDING PROJECTS, CONSULTANCIES AND BOOK WRITING	Seminar	2020-2021	
27	post covid challenges and opportunity in Biomedical Engineering	Seminar	2020-2021	
28	Cyber Security - Enterprise Perspective	Seminar	2020-2021	
29	Machine Learning in Healthcare and Agriculture	Seminar	2020-2021	
30	Massive MIMO and Millimeter Wave MIMO Technologies for 5G Networks	STTP	2020-2021	
31	Developing Research and Development Culture in Industry Institute Interaction Oriented Modern Teaching Learning and Project Based Learning	STTP	2020-2021	
32	Smart Materials, Automation and its Future Impact on Humans	STTP	2020-2021	

Research Activities					
S.No	Description	Academic Year	Is Funded	Funded Agency	Fund Amount
1	Got a Financial Assistance of Rs.150000 by APJKTU to conduct a five day FDP during the year 2021	2021-2022	Yes	APJKTU	
2	Got a Financial Assistance of Rs.20000 by Kerala State Council for Science,Technology and Development to conduct a three day Programme during the year 2018.	2020-2021	Yes	Kerala State Council for Science,Technology and Development	
3	Got a Financial Assistance of Rs.305667 by AICTE to conduct a six day STTP during the year 2020	2020-2021	Yes	AICTE	

Projects Guided					
S.No	Description	Academic Year	Is Funded	Funded Agency	Fund Amount
1	Research Scholar: Vijith	2024-2025	No		
2	Research Scholar: Vrinda	2024-2025	No		
3	Research Scholar: Praveena	2024-2025	No		

4	Research Scholar: Jinu Sebastian	2022-2023	No		
5	Research Scholar:Chaithanydas	2022-2023	No		

Interactions with Outside World

S.No	Description	Academic Year
1	Advisory/Technical Program Committee member of 5th International Conference on Smart Electronics and Communication [ICOSEC 2024] will be organized by Kongunadu College of Engineering and Technology on 18-20, September 2024.	2024-2025
2	Dr. G. R. Gnana King served as a Guest Speaker on "Segmentation Using Deep Learning Algorithms" at St. Xavier's Catholic College of Engineering, hosted by the Department of Electronics and Communication Engineering on May 27, 2024	2024-2025
3	Dr. G. R. Gnana King delivered a Guest Lecture on "Entrepreneurship for Engineers" for UG students at Lord Jegannath College of Engineering and Technology, Nagercoil, on September 14, 2024.	2024-2025
4	Delivered a special lecture on "Fundamentals of Image Processing" to Final Year B.Tech – CSE Students of SRM Institute of Science and Technology on 08/02/2023	2023-2024

Positions Held / Other Responsibilities

S.No	Description	Academic Year	Period
1	Probationary Officer (PO) for the GATE (Graduate Aptitude Test in Engineering) and JAM (Joint Admission Test for Masters) during the year 2021, 2022, 2024.	2024-2025	In this college
2	KTU represented External Academic Auditor	2024-2025	In this college
3	Question paper setter for other Autonomous Institutions	2024-2025	In this college
4	PG Coordinator	2024-2025	In this college
5	University Coordinator	2024-2025	In this college
6	University Valuation Camp Officer	2024-2025	Currently in Charge in this college
7	IQAC Coordinator	2023-2024	In this college

Research Interests

S.No	Description
1	Image Processing & Computer Vision Image compression techniques (LZW, Wavelet Transform, etc.) Medical image processing (MRI, PET, SPECT fusion) Image segmentation and classification Video watermarking and tamper-proofing Object detection and tracking
2	Medical Imaging & AI Applications in Healthcare Brain tumor detection and classification Pancreatic cancer detection using CNN models COVID-19 detection from CT scans and chest X-rays Alzheimer's disease diagnosis using AI-based models Glucose monitoring
3	Internet of Things (IoT) & Embedded Systems IoT-based health monitoring systems Smart energy meters and automation Embedded vision systems using Raspberry Pi Real-time object detection and control (RFID-based toll systems, Speed control)
4	Artificial Intelligence & Machine Learning AI-based disease prediction models Deep learning for image classification (UNET, CNN, ResNet) Model-based design using FPGA Optimization techniques (Spider Monkey Optimization, DETS-optimized ResNet)
5	Wireless Communication & Sensor Networks Wireless sensor networks security Personal identification using wireless biometric systems Two-wire tether interface modem for underwater monitoring
6	Robotics & Automation Human detection robots for flood rescue Automatic load-carrying robots Assistive medical robots
7	Signal Processing & Data Compression Hybrid compression techniques for compound images Vector quantization and region merging techniques Data compression for rocket engine test data

Achievements

S.No	Description
1	Received Academic Excellence award during the year 2024.
2	Received Academic Excellence award during the year 2023.
3	Received Academic Excellence award during the year 2019.
4	Selected for the IRDP Awards 2019 for the remarkable Achievements in Teaching, Research and Publications
5	Received the certificate of excellence during the year 2018
6	Got an token of Appreciation for fostering an ecosystem bridging Government Industry and Academia from DST and Texas Instruments.

Subjects Interested

Patents					
S.No	Patent No.	Title	Description	During Academic Year	Patent Status
1	399397-001 Date : 07/11/2023			2023-2024	Granted
2	202141038348A			2021-2022	Published

MOOC Course Completed					
S.No	Title	Conducted By	From Date	To Date	Duration
1	Digital Image Processing	NPTEL	2024-01-01	2024-02-06	4 weeks
2	Patent Drafting for Beginners	NPTEL	2024-01-01	2024-02-06	4 weeks

Administrative Work			
S.No	Title	During Academic Year	
1	RDC Member	2024-2025	
2	Admission Coordinator	2024-2025	
3	PG Coordinator	2024-2025	
4	University Valuation Camp Officer	2024-2025	

Professional Body Membership					
S.No	Name of Profesional Body	Type of Membership	Member Since	Membership Id	Description
1	IEEE	Annual Membership	2024-2025	100143161	
2	ISTE	Lifetime Membership	2020-2021	LM 70275	
3	BMESI	Lifetime Membership	2020-2021	LM 1478	