




Profile of Faculty

Name	Dr. MARTIN JOEL RATHNAM		
Date of Birth	09-AUGUST-1986		
Unique ID	SCET23EC01		
Designation	ASSOCIATE PROFESSOR		
Department	Dept of CSE (IoT & Cyber Security including Block Chain Technology)		
Date of Joining	02-JANUARY-2023		
Educational Qualifications			
UG	PG (Specialization)	Ph.D (Specialization)	
B.E (ELECTRONICS AND COMMUNICATION ENGINEERING) Don Bosco Institute of Technology, Bengaluru, Karnataka. VTU.	M.Tech (INFORMATION AND COMMUNICATION SYSTEMS) Malnad College of Engineering, Hassan, Karnataka. VTU.	Ph.D (INFORMATION AND COMMUNICATION ENGINEERING) Chennai, Tamil Nadu. Anna University.	
Others (any other Qualification)	NIL		
Work Experience	Teaching	13 YEARS 3 MONTHS	
	Research	NIL	
	Industry	NIL	
	Others	NIL	
Research Guidance			
No of Papers Published	National Journals	20	
	International Journals	3	
	International Conferences	3	
Master degree	Completed	Completed	
	Ongoing	NIL	
Ph.D	Completed	Completed	
	Ongoing	NIL	
Projects Carried Out	NIL		
Patents	Filed	3	
	Granted	1	



Technology Transfer		NIL
No. of Books published with details		
Name of the book	Publisher with ISBN	Year of Publication
SIGNALS AND SYSTEMS	Scientific International Publishing House 978-93-6132-734-6	2024
Professional Memberships	AMIE (Associate Member of the Institution of Engineers) LMISTE (Life Member of the Indian Society for Technical Education) IAENG (International Association of Engineers) IEEE Membership: #99900478 ORCID ID: 0000-0001-9804-8894 RESEARCHER ID: HNQ-5811-2023 GOOGLE SCHOLAR ID: zVdqCQsAAAAJ VIDWAN ID: 358418 SCOPUS ID: 59256460000	
Consultancy Activities	NIL	
Awards	NIL	
Grants Received	NIL	
Other Achievements	Editor & Reviewer in International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences	
	Reviewer in International Journal of Innovative Research in Computer and Communication Engineering	
	Reviewer in International Journal of Innovative Research in Science Engineering and Technology	
	Infosys springboard certifications in the following courses. <ol style="list-style-type: none"> 1. Adobe Experience Cloud Suite 2. Basics of Python 3. Introduction to Artificial Intelligence 4. High Impact Presentations 5. Angular 6. Communicating to Succeed 7. Demystifying Strategy 8. Introduction to Natural Language Processing 9. Blockchain in Depth 10. Building an Agile Mindset 11. Introduction to Open AI GPT Models 12. Introduction to Robotic Process Automation 13. Internet of Things 201 14. Introduction to Business Intelligence 15. Prompt Engineering 16. IoT Edge Computing and IoT Analytics 17. Electronics Course 	
	NPTEL certifications in the following courses. <ol style="list-style-type: none"> 1. Foundation of Cloud IoT Edge ML 2. Introduction to Internet of Things 	



	NITTT certifications in the following courses. <ol style="list-style-type: none">1. Module 12. Module 23. Module 44. Module 65. Module 8
	Innovation Ambassador Certifications in the following courses. <ol style="list-style-type: none">1. Foundation Level2. Reskilling3. Advanced Level
	Pledges Taken: <ol style="list-style-type: none">1. Narcotics Control Bureau – “Yes to Life, No to Drugs”.2. Integrity Pledge.
	Certificate of Appreciation was given by TNS India foundation to me for being a ‘Judge’ in the Skill Drill Event organized at Sri Sairam College of Engineering, Anekal, Bengaluru, Karnataka.
	Industrial Training and Internship: <ol style="list-style-type: none">1. AR & VR with Emphasis in Unreal Engine at Monolith Technologies, from 27th May 2024 to 31st May 2024 at Monolith Research & Training Labs, Chennai, Tamil Nadu.
	SKILL ENHANCEMENT WORKSHOP / FDP ATTENDED: <ol style="list-style-type: none">1. At Sri Sairam College of Engineering Bengaluru - Training in Internal Auditing for ISO 9001-2015 Management Systems and Standards on 24th August 2023, Certificate on successful completion.2. At Jyothy Institute of Technology - e-Yanthra - 'Introduction to Embedded System and Robotics from 8th September 2023 to 9th September 2023, Certificate on successful completion.3. At Sri Sairam College of Engineering Bengaluru - 'A method of writing research articles and successful research proposal' webinar on 9th September 2023, Certificate on successful completion.4. At Sri Sairam Engineering College, Chennai - Intel Unnati FDP 26th September 2023 to 29th September 2023, Certificate on successful completion



5. At Sri Sairam College of Engineering Bengaluru - 'Glimpse of research article crafting' workshop on 25th November 2023, Certificate on successful completion.
6. An AICTE - FDP - 'Inculcating universal human values in technical education' at SSCE from 1st December 2023 to 3rd December 2023, Certificate on successful completion.
7. At Sphoorthy Engineering College -Five Days Online FDP ON "AI - Insights Predictive Power of ML, DL, NLP" organized by the department of AIML 14th May 2024 to 18th May 2024 Certificate on successful completion.
8. A NPTEL - FDP AICTE "FOUNDATION OF CLOUD IOT EDGE ML". Certificate on successful completion.
9. At Oxford College of Engineering - Two Weeks International - "Advancement in Quantum computing and Sensor Technology" from 15th April 2024 to 27th April 2024 conducted by dept of CSE, ISE, ECE and EEE. Certificate on successful completion.
10. At Oxford College of Engineering -FDP on "Frontiers of Photonic Integrated Circuits and Sensing Technologies from 1st April 2024 to 5th April 2024 by the dept of ECE and EEE. Certificate on successful completion.
11. At CHRIST (DEEMED TO BE UNIVERSITY) - ATAL FDP from 21st October 2024 to 26th October 2024 - "Emerging Technologies for Observing Earth from Space".

PATENTS: 3

1. Title of the invention: Computer Webcam with Motion Detection Unit
International Design Classification: Version: 14-2023

Class: 16 Photographic, cinematographic and optical apparatus

Subclass: 01 Photographic cameras and film cameras

Certificate of Registration for a UK Design,

Design number: 6322565

Grant date: 07 November 2023

Registration Date: 28 October 2023

2. Title of the invention: Greenhouse Monitoring and Control System Using IOT

INDIAN PATENT APPLICATION PUBLICATION

Application No.202441034188 A (19) INDIA (22)

Date of filing of Application :30/04/2024

Publication Date: 10/05/2024

3. Title of The Invention: Design and Implementation of Low-Power IOT devices for environmental monitoring applications

INDIAN PATENT APPLICATION PUBLICATION

Application No.417337-001 CBR No: 208541



INTERNATIONAL JOURNAL PUBLICATIONS: 3

1. A Novel Method for Cataract Detection and Segmentation Using Nakagami Distribution
[Journal of Medical Imaging and Health Informatics](#), Volume 12, Issue Number 1, January 2022, pp. 45-51(7)
ISSN [2156-7018](#) (Print); ISSN [2156-7026](#) (Online)
Publisher: [American Scientific Publishers](#)
doi: <https://doi.org/10.1166/jmihi.2022.3924>
Link: <https://www.ingentaconnect.com/contentone/asp/jmihi/2022/000000012/00000001/art00007>
2. Detection Of Cataract Using Convolutional Neural Networks
[Journal of Systems Engineering and Electronics](#) (ISSN NO: 1671-1793)
Volume 34 ISSUE 11 2024, pp. 335-354(19)
Publisher: Science Press
doi: [20.14118.jsee.2024.V34I11.1996](#)
Link: <https://jseepublisher.com/wp-content/uploads/26-JSEE2777.pdf>
3. Integration of AI and agent-based modeling for simulating human-ecological systems
[The Scientific Temper](#) (2025) Vol. 16 (1): 3863-3870
E-ISSN: 2231-6396, ISSN: 0976-8653
doi: 10.58414/SCIENTIFICTEMPER.2025.16.1.33
Received: 09/01/2025 Accepted: 21/02/2025 Published: 20/03/2025
Link: <https://scientifictemper.com/index.php/tst/article/view/1910>

INTERNATIONAL JOURNAL PUBLICATIONS (UGC): 20

1. Non-Invasive Measurement of Stress Levels in Knee Using IOT
[International Journal of Advanced Trends in Engineering and Management \(IJATEM\)](#) pp. 263-271, ISSN (Online): 2583-7052
Publisher: IJATEM
doi: <https://ijatem.com/special-issues/non-invasive-measurement-of-stress-levels-in-knee-using-iot/>
2. Virtual Mouse - Hand Gesture Recognition System
[International Journal of Innovative Research in Advanced Engineering](#), Volume 10, Issue 06, Pages 313-319, Year 2023.
Publisher: AM Publications, India.
doi: <https://doi.org/10.26562/ijirae.2023.v1006.13>
3. A Novel Impervious Surface Extraction Method Integrating POI, Vehicle Trajectories and Satellite Imagery
[International Journal of Innovative Research in Science, Engineering and Technology](#), Volume 11, Pages 186-190, Year 2022.
Link:
https://www.ijirset.com/upload/2022/ncfcsp/29_A%20Novel.pdf



4. Intrusion Detection of Imbalanced Network Traffic Based on Machine Learning and Deep Learning

International Journal of Innovative Research in Science, Engineering and Technology, Volume 11, Pages 196-200, Year 2022.

Link: https://www.ijirset.com/upload/2022/ncfcsp/31_Intrusion.pdf

5. A Smart Pill Box to Remind Medicine Consumption for Patients Using IOT.

International Journal of Innovative Research in Science, Engineering and Technology, Volume 10, Pages 14288-14290, Year 2021.

doi: [10.15680/IJIRSET.2021.1011037](https://doi.org/10.15680/IJIRSET.2021.1011037)

Link:

https://www.ijirset.com/upload/2021/november/37_A%20Smart%20NC.pdf

6. Wireless Rash Driving Detection System

International Journal of Innovative Research in Science, Engineering and Technology, Volume 10, Pages 14294-14296, Year 2021.

doi: [10.15680/IJIRSET.2021.1011039](https://doi.org/10.15680/IJIRSET.2021.1011039)

Link:

https://www.ijirset.com/upload/2021/november/39_Wireless_NC.pdf

7. Intelligent surveillance and night patrolling using drone camera

International Research Journal of Engineering and Technology, Volume 8, Pages 13-16, Year 2021.

e-ISSN:2395-0056 p-ISSN:2395-0072

Link: https://www.irjet.net/archives/V8/i4/Special_issue/IRJET-V8SI03.pdf

8. Face Detection Based ATM Security System Using Embedded Linux Platform and RFID System

International Research Journal of Engineering and Technology, Volume 8, Pages 108-112, Year 2021.

e-ISSN:2395-0056 p-ISSN:2395-0072

Link: <https://www.irjet.net/archives/V8/i5/IRJET-V8I530.pdf>

9. An Electronic Chatting Gloves For Visually Impaired People Based Capacitive Touch Sensor Technology

International Research Journal of Engineering and Technology, Volume 8, Year 2021.

e-ISSN:2395-0056 p-ISSN:2395-0072

Link: <https://www.irjet.net/archives/V8/i5/IRJET-V8I503.pdf>



10. Design and implementation of gait monitoring system for the elderly person

International Research Journal of Engineering and Technology,
Volume 8, Pages 111-114, Year 2021. e-ISSN:2395-0056 p-
ISSN:2395-0072

Link: https://www.irjet.net/archives/V8/i4/Special_issue/IRJET-V8SI30.pdf

11. Developing industries underground water level limits by designing a maintenance and controlling system using IOT.

International Research Journal of Engineering and Technology,
Volume 8, Pages 164-167, Year 2021. e-ISSN:2395-0056 p-
ISSN:2395-0072

Link: https://www.irjet.net/archives/V8/i4/Special_issue/IRJET-V8SI43.pdf

12. Design and implementation of a drowning detection and rescue system using wireless sensor network

International Research Journal of Engineering and Technology,
Volume 8, Pages 161-164, Year 2021. e-ISSN:2395-0056 p-
ISSN:2395-0072

Link: <https://www.irjet.net/archives/V8/i5/IRJET-V8I544.pdf>

13. Accident Prevention Based on Climatic Condition using Sonar and IoT for Electrical Vehicle

International Journal of Innovative Research in Science, Engineering and Technology, Volume 9, Pages 350-353, Year 2020.

Link:

https://www.ijirset.com/upload/2020/ncfcsp/61_BATCH_28_Accident_350.PDF

14. IOT Based Smart Geyser

International Journal of Innovative Research in Science, Engineering and Technology, Volume 9, Pages 344-349, Year 2020.

Link:

https://www.ijirset.com/upload/2020/ncfcsp/60_BATCH_27_MINI_344.PDF

15. Retina Fundus Image Registration via Vascular Structure Graph Matching

International Journal of Innovative Research in Science, Engineering and Technology, Volume 9, Pages 340-343, Year 2020.

Link:

https://www.ijirset.com/upload/2020/ncfcsp/59_BATCH_27_MAIN_340.PDF



	<p>16. IOT Based Voltage Monitoring and Control for Electronic Auto by Using Arduino and GPRS</p> <p>International Journal of Innovative Research in Science, Engineering and Technology, Volume 8, Pages 161-165, Year 2019. Link: https://www.ijirset.com/upload/2019/ncfcsp/33_Batch%2032.pdf</p> <p>17. PLC Based Control System for Steam Boiler</p> <p>International Journal of Innovative Research in Science, Engineering and Technology, Volume 8, Pages 94-96, Year 2019. Link: https://www.ijirset.com/upload/2019/ncfcsp/18_batch%2019%20journal.pdf</p> <p>18. Digital Stopwatch Timer Circuit Using 555timer and CD4033</p> <p>International Journal of Innovative Research in Science, Engineering and Technology, Volume 7, Pages 290-294, Year 2018. Link: https://www.ijirset.com/upload/2018/ncfcsp/J53_Digital.pdf</p> <p>19. IOT Based Women's Safety Gadget</p> <p>International Journal of Innovative Research in Science, Engineering and Technology, Volume 7, Pages 286-289, Year 2018. Link: https://www.ijirset.com/upload/2018/ncfcsp/J52_IOT.pdf</p> <p>20. Highly Efficient Environment Aware wireless sensor network</p> <p>International Journal of Innovative Research in Science, Engineering and Technology, Volume 7, Pages 157-160, Year 2018. Link: https://www.ijirset.com/upload/2018/ncfcsp/J27_Highly.pdf</p>
	<p>INTERNATIONAL CONFERENCE PUBLICATIONS: 3</p> <p>1. Chaotic Leader Particle swarm optimization (CL-PSO) for efficient data storage in a cloud-based Hadoop distributed file system (HDFS) Published in: 2024 4th International Conference on Intelligent Technologies (CONIT) Date of Conference: 21-23 June 2024 DOI: 10.1109/CONIT61985.2024.10627079 Date Added to IEEE Xplore: 15 August 2024 Publisher: IEEE Conference Location: Bangalore, India ISBN Information: Electronic ISBN:979-8-3503-4990-0 Print ISBN:979-8-3503-4988-7 CD:979-8-3503-4987-0 USB ISBN:979-8-3503-4989-4 Print on Demand (PoD) ISBN:979-8-3503-4991-7</p>



- | | |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>2. Hybrid Grey Wolf and Particle Swarm Optimized (HGW-PSO) Scheduling in Containerized Cloud Computing Environment</p> <p>Published in: 2024 5th International Conference for Emerging Technology (INCET)</p> <p>Date of Conference: 24-26 May 2024</p> <p>DOI: 10.1109/INCET61516.2024.10593037</p> <p>Date Added to IEEE <i>Xplore</i>: 26 July 2024</p> <p>Publisher: IEEE</p> <p>Conference Location: Belgaum, India</p> <p>ISBN Information:</p> <p>Electronic ISBN:979-8-3503-6115-5</p> <p>DVD ISBN:979-8-3503-6112-4</p> <p>Print on Demand (PoD) ISBN:979-8-3503-6116-2</p> |
| | <p>3. Automation of Cataloging an Abnormal Condition of Glaucoma Using Fundas Image of the Retina</p> <p>Published in: 2024 Third International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT)</p> <p>Date of Conference: 24-26 July 2024</p> <p>DOI: 10.1109/ICEEICT61591.2024.10718487</p> <p>Date Added to IEEE <i>Xplore</i>: 23 October 2024</p> <p>Publisher: IEEE</p> <p>Conference Location: Tiruchirappalli, India</p> <p>ISBN Information:</p> <p>Electronic ISBN:979-8-3503-6908-3</p> <p>Print on Demand (PoD) ISBN:979-8-3503-6909-0</p> |