# Sri Ramakrishna Institute of Technology

## (An Autonomous Institution)

(Accredited by NAAC with "A" Grade)

Pachapalayam, Perur Chettipalayam, Coimbatore – 641 010

www.srit.org :: Phone – 0422-2605577

## Faculty Profile

| Full name with Qualification, Designation and Department: | | | | |
|---|---|---|---|---|
| **Dr. R KUMAR, M.E, Ph.D.,** <br> Associate Professor, <br> Computer Science and Engineering | | | Photo Soft copy | |
| Date of birth | : | 16/05/1983 | Gender | : | Male |
| Nationality | : | Indian | Marital status | : | Married |
| Address for correspondence | : | 7, INTUC Nagar, Thoundamuthur Road, Sundappalayam Post, Coimbatore 641010. | Permanent address | : | 7, INTUC Nagar, Thoundamuthur Road, Sundappalayam Post, Coimbatore 641010 |
| Mobile no | : | 97866 99809 | e-mail (official) | : | kumar.cse@srit.org |
| Landline | : | - | e-mail (personal) | : | profkumarr.cse@gmail.com |
| Date of joining | : | 02/01/2023 | Post of joining | : | 02/01/2023 |
| No of promotions since D.O.J | : | - | Present post | : | Associate Professor |
| Present pay scale | : | 37400-67000 | Gross pay | : | 61812 |
| Employer ID | : | TE434 | Bank account No. (Salary credited) | : | 500101010539212 |
| P.F. No | : | TN/CBE/56764/10957 | Group Insurance No | : | - |
| PAN Number | : | AWRPK5743P | Aadhar Number | : | 461764281232 |
| AICTE ID | : | 1-43490860731 | AICTE Institution ID | : | 1-7841521 |

Educational Qualification

| Degree | Specialization | Year of Passing | Name of the College | Name of the University | Class Obtained |
|---|---|---|---|---|---|
| PG | Information Technology (5 Years Integrated) | 2005 | SSM College of Engineering | Periyar University, Salem | First Class |
| PG | Computer Science and Engineering | 2077 | Sri Krishna College of Engineering and Technology | Anna University, Chennai | First Class |
| Ph.D | Information and Communication Engineering | 2015 | Coimbatore Institute of Technology | Anna University, Chennai | Recommended |
| Others | NIL | | | | |

**Registration for Ph.D. with area of interest:** Wireless Networks

**Year of Ph.D. Registration:** 2009          **Year of Ph.D. Completed:** 2015

**Thesis Title:** SECURE ROUTING IN WIRELESS NETWORKS USING CONGITIVE SCIENCE APPROACH

**Supervisor Recognition Number:** 2740157

Ph.D. Scholar Details

| S.No. | Name of the scholar | Registration details | College | Status |
|---|---|---|---|---|
| NIL | | | | |

Academic Experience

| Name of the College | Designation | Joining Date | Relieving Date | Experience Years | Experience Months | Experience Days |
|---|---|---|---|---|---|---|
| Sri Ramakrishna Institute of Technology | Assistant Professor | 25/06/2007 | 31/05/2018 | 10 | 11 | - |
| CMS College of Engineering and Technology | Associate Professor | 04/07/2018 | 30/12/2022 | 4 | 6 | - |
| Sri Ramakrishna Institute of Technology | Associate Professor | 02/01/2013 | Till Date | - | 10 | - |

|  |  |  |  | Total | 16 | 2 |  |
|---|---|---|---|---|---|---|---|

## Industrial Experience

| Name of the Organisation | Designation | Nature of Work | Joining Date | Relieving Date | Experience | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  | Years | Months | Days |
| NIL | | | | | | | |

## Courses Handled

| Academic Year | Semester | Course Name | Type of Course (T / L) | Pass Percentage |
|---|---|---|---|---|
| 2007-2008 | ECE-A VII | Internet and Java | T | 97 |
| 2007-2008 | CSE VII | Internet Programming | T | 96 |
| 2008-2009 | IT - V | Computer Networks | T | 91.6 |
| 2008-2009 | IT - VI | Network Programming and Management | T | 96.6 |
| 2009-2010 | IT - VII | Mobile Computing | T | 86.6 |
| 2010-2011 | IT - VI | Computer Networks | T | 87.8 |
| 2010-2011 | IT - VII | TCP\IP Design & Implementation | T | 100 |
| 2010-2011 | IT –VIII | High Speed Networks | T | 96.1 |
| 2011-2012 | IT - VIII | Mobile Computing | T | 84 |
| 2011-2012 | IT-VIII | Elective V – High Speed Networks | T | 94 |
| 2012-2013 | IT-V | Computer Networks | T | 88 |
| 2012-2013 | IT-VIII | Elective V - High Speed Networks | T | 95 |
| 2013-2014 | IT-V | Computer Networks | T | 95 |
| 2013-2014 | IT-VII | TCP/IP Design and Implementation | T | 99 |
| 2013-2014 | IT-VI | Network Programming and Management | T | 78 |
| 2014-2015 | IT-V | Computer Networks | T | 88 |
| 2015-2016 | ECE – III | Object Oriented Programming and Data Structures | T | 89 |
| 2015-2016 | IT-VI | Mobile Computing | T | 100 |
| 2016-2017 | ECE – III | Object Oriented Programming and Data Structures | T | 89 |
| 2016-2017 | IT-VII | Information Management | T | 100 |
| 2016-2017 | IT-VI | Mobile Computing | T | 93 |
| 2016-2017 | IT-VIII | Service Oriented Architecture | T | 100 |
| 2017-2018 | ECE – III | Object Oriented Programming and Data Structures | T | 87 |

| 2018-2019 | CSE-VII | High Speed Networks | T | 92 |
|---|---|---|---|---|
| 2018-2019 | CSE-III | Object Oriented Programming using JAVA | T | 82 |
| 2018-2019 | CSE-VIII | Cryptography and Network Security | T | 89 |
| 2018-2019 | CSE-VI | Database Management Systems | T | 92 |
| 2019-2020 | CSE-VII | High Speed Networks* | T | 100 |
| 2019-2020 | CSE-III | Object Oriented Programming using JAVA* | T | 100 |
| 2020-2021 | EEE-VI | Object Oriented Programming using JAVA* | T | 100 |
| 2020-2021 | CSE-VIII | Cryptography and Network Security* | T | 100 |
| 2020-2021 | CSE-VI | Database Management Systems* | T | 100 |
| 2021-2022 | CSE-VIII | Cryptography and Network Security | T | 96 |
| 2021-2022 | CSE-III | Object Oriented Programming using JAVA | T | 83 |
| 2022-2023 | CSE-VII | Full Stack Programming | T | 96 |
| 2022-2023 | ECE-VI | Basics of Python Programming | T | 95 |

## Projects Guided

| Academic Year | Semester | Project Title | UG / PG |
|---|---|---|---|
| 2017-2018 | VIII | Design of An SKU based Advanced Inventory Management System for educational organisations | UG |
| 2016-2017 | VIII | Intellectual Way Finder for Sri Ramakrishna Institute of Technology | UG |
| 2015-2016 | VIII | Soil Moisture Sensor System using Intel Galileo | UG |
| 2015-2016 | VIII | Cipher X-Ray:A framework to monitor the malwares in the network | UG |
| 2014-2015 | VIII | Real time disaster intimation through social networking | UG |
| 2014-2015 | VIII | An Efficient Trie-based Method for Entity Extraction | UG |
| 2013-2014 | VIII | Effective Data Transmission with Network Analyzer | UG |
| 2012-2013 | VIII | Smart PDF reader for Android | UG |
| 2011-2012 | VIII | Smart Bus Finder | UG |
| 2011-2012 | VIII | Multipath Optimized Link state Routing for Mobile Adhoc Networks | UG |
| 2011-2012 | VIII | Performance Evaluation of Gateway Discovery Approaches in Integrated MANET-Internet Scenario | UG |
| 2010-2011 | VIII | Improving location accuracy in mobile sensor networks | UG |
| 2010-2011 | VIII | A Cryptography Approach to defend Against IP snooping | UG |

| 2009-2010 | VIII | Design of An SKU based Advanced Inventory Management System for educational organisations | UG |
|-----------|------|---------------------------------------------------------|-----|
| 2009-2010 | VIII | Intellectual Way Finder for Sri Ramakrishna Institute of Technology | UG |
| 2008-2009 | VIII | Soil Moisture Sensor System using Intel Galileo | UG |
| 2007-2008 | VIII | Cipher X-Ray:A framework to monitor the malwares in the network | UG |

## Publications

| Publications | SCI / Scopus / Web of Sciences | Others |
|--------------|--------------------------------|--------|
| Journal | 11 | 5 |
| Conferences | 1 | - |

## Journal Publications

1. S. Aramuthakannana, M. Ramya Devi, S. Lokesh and R. Kumar, "Movie recommendation system using taymon optimized deep learning network", Journal of Intelligent & Fuzzy Systems, IOS Press, 2023,

2. Balamurugan Easwaran, S. Aramuthakannan, S. Lokesh, R. Kumar, Kuntal Jyoti Saikia, Utpal Saikia, "A Study on the Use of Data Science in Healthcare Applications and the Mathematical Issues in Data Science", Journal Of Algebraic Statistics, Publishoa, 2022, https://publishoa.com/index.php/journal/article/view/910

3. R.Kumar, S.Lokesh, M.Ramya Devi, "Identifying Camouflaging Adversary in MANET Using Cognitive Agents", An International Journal Wireless Personal Communication, ISSN 0929-6212, pp 1 -15, February 2018. SNIP:0.726, SJR:0.313, CITE Score: 1.12

4. Kumar R, Abirami R, "A Novel Database System Model for Automated Fee Collection System", International conference on Modelling Simulation and Control, Vol: 1, pp.551-555, 2017.

5. Dr.R.Kumar and S.Lokesh, "Fast and Secure Transmission of Information among groups using a Key Management scheme", International Journal of Computer Science and Mobile Computing, Vol.4 Issue.11, November- 2015, ISSN 2320–088X.

6. Kumar R and Kousalya G, "A Transactions Based Secure Routing Protocols in Wireless Networks using Cognitive Science Approach", Journal of Security and Communication Networks, Published online in Wiley, DOI:10.1002/sec1060, 2014.

7. Kumar R and Kousalya G, "A Survey on Transaction Based Secure Routing in Wireless Networks", Journal of Theoretical and applied Information Technology, 2014, Vol.60, No.1, pp.165-173, ISSN: 1817-3195.

8. Kumar R and Kousalya G, "Cognitive Agents Based Security Scheme to Handle Routing Loops in Wireless Networks", Journal of Computer Science 2014, Vol.10, No.10, DOI:10.3844, pp.1712-1724, ISSN:1549-3636.

9. Srihari K, Kumar R and Rajesh S, "Certain investigation on multicasting using various algorithms". International Journal of Recent Scientific Research. Vol.3, April 2014.

10. Kumar R, "Performance Evaluation of Gateway Discovery Approaches in the Integrated Mobile AdHoc Network (MANET) – Internet Scenario", International Journal of Computer Technology and Electronics Engineering (IJCTEE) Vol.2, Issue 3, 2012.

11. Kumar R, Saravana Kumar S, "Improvement of TCP Throughput in Wireless Networks with Delay Round-Trip Time", CiiT International Journal of Wireless Communication, DOI: WC32010001, March 2010.

Patent

| Title of the Patent | Application No. | Published Year |
|---|---|---|
| System for Efficient Transportation of Medical Oxygen to COVID Patients at Home Quarantine | 202141020747 | 2021 |
| Covid-19 Patient Healthcare Monitoring System Using Iot And Wearable Sensors | 202241003768 A | 2022 |
| System and Method for Generating Cybersecurity Analytics of Enterprise Data Using Threat Based Artificial Intelligence | 202241007240 A | 2022 |
| Ensemble Deep Learning Model for Brain Tumour Detection and Classification | 202341036167 A | 2023 |

Consultancy

| S. No. | Organization/ Agency | Nature of Work | Amount in Rs. | Year |
|---|---|---|---|---|
| 1 | Mahamaya Impex, Erode | Stock pile and due maintenance automation system | 45,000/- | 2015-2016 |
| 2 | Fortec Engineers, Coimbatore | Website creations | 34,500/- | 2015-2016 |
| 3 | Sri Ramakrishna Group of Institutions, Coimbatore | Feedback Management Systems | 35,000/- | 2017-2018 |
| 4 | CMS Group of Institutions, Coimbatore | Course Outcomes Attained software | 75,000/- | 2019-2020 |
| 5 | CMS Group of Institutions, Coimbatore | Enhanced feedback management systems for NAAC | 55,000/- | 2021-2022 |

## Workshops / Seminars attended

1. Attended One Day National Seminar on "Biotechnological Applications Using Fiber-Optic sensors" by Kongunadu College of Engineering and Technology, Tricy on 12th March 2022.

2. Attended one day workshop on "PC Troubleshooting and Networking", Sri Ramakrishna Institute of Technology on 26th October 2017.

3. Attended two days workshop on "Advances in Artificial Intelligence", Sri Ramakrishna Institute of Technology on 22nd and 23rd December, 2016

4. Attended one day International Workshop on "Outcome Based Education" by Rathinam Technical Campus on 15th and 16th September, 2016.

5. Attended Two Days National Seminar on "Digital Image Processing and its Applications" by Sri Ramakrishna Institute of Technology, Coimbatore on 3rd March 2015.

6. Attended one day workshop on "Linux Administration and Kernal Programming", Sri Ramakrishna Institute of Technology on 13th February 2015.

7. Attended One week workshop on "Infosys Campus Connect Program" by Infosys Solution at SRR Engineering College, Chennai on 2nd & 6th March 2013.

8. Attended One Workshop on "Simulation on Networks with NS2 – A Practical Approach" by Sri Ramakrishna Engineering College, Coimbatore on 3rd & 4th March 2011.


## Faculty Development Program attended

1. Attended One week Faculty Development Programme on "Artificial Intelligence for Real Time Applications" on 25th April to 29th April, 2022 in Mepco Schlenk Engineering College, Sivakasi.

2. Attended Five days Faculty Development Programme on "Recent Advances in Deep Learning and its Applications" on 7th March to 11th March, 2022 in Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam.

3. Attended Five days Faculty Development Programme on "Image Processing & Computer Vision" on 28-02-2022 to 04-03-2022 in Bharathiyar Institute of Engineering for Women, Salem.

4. Attended Two weeks Faculty Development Program on "IoT & Applications (Smart Systems)" organised by Electronics and ICT Academics held from 14 – 25 February under IIT Guwahati.

5. Attended Two weeks Faculty Development Program on "Machine Learning for Computer Vision" organised by Electronics and ICT Academics held from 21 – 04 March under IIITDM Jabalpur.

6. Attended Six days Short-Term training programme on "Cyber Security: Challeges and Technologies" on 03-01-2022 to 08-01-2022 in MIT Campus, Anna Univeristy, Chennai.

7. Attended three days Faculty Development Programme on "Stress Management" on 11th to 13th , 2020 in ICT Academy through CMS College of Engineering and Technology, Coimbatore

## Events Organized

1. Organized one day faculty development program on How to write course outcomes on 17.08.2018.

2. Organized two days hands on workshop PHP and MySQL on 13.09.2019 & 14.09.2019.

3. Organized two days hands on workshop Web Framework using Bootstrap 4 on 03.08.2019 & 04.08.2019.

4. Organized one day faculty development program on Attainment of Course Outcomes on 12.09.2018.

5. Organized one day faculty development program on How to write course outcomes on 17.08.2018.

6. Organized National Conference on Innovative Technologies In Computer CCCA'15 on 13.03.2015.

7. Organized National Level Technical Symposium- Xplosion'15 on 25.02.2015

8. Organized Two days Faculty Development Program on .Net Framework from 13.06.2014 to  14.06.2014.

9. Organized National Level Technical Symposium Xplosion'13 on 01.10.2013.

10. Organized Interaction Programme on Web Application Development 29.03.2013 & 30.03.2013.

11. Best Faculty Award for beign an outstanding teaching performance for the Acadmic year 2012-2013.

12. Organized Guest Lecture on Computer Networks.

13. Organized National Innovative Technologies In Computer CCCA'13 on 15.03.2013.

## Value Added Course Handled

| Name of the course | Reason(s) for creating facility | Utilization | Areas in student's are expected to have enhanced learning |
|---|---|---|---|
| Bootstrap Framework | To acquire knowledge in website creating and developing | Third Year students were undergone 15 hrs/Week | HTML5, CSS3 |
| PHP and MySQL | To acquire knowledge in website application developing and database maintaining | Third Year students were undergone hrs/Week | PHP 7.4, MySQL |
| Django Framework | To keep the students abreast of gaining practical knowledge and the latest technologies like MVT and its Prototypes | Final Year students were undergone 12 Hrs./Week | Python, SQLite |
| Programming language Training | To acquire knowledge in Programming Language such as C, C ++ along with Data Structures. | Final Year students were undergone 26 Hrs./Week | To increase the analysis skills and problem solving. |

## International Certificates

| Title Of The Course | Provider | Certified Year |
|---|---|---|
| Machine Learning with Python: A Practical Introduction | edX - IBM | 2021 |
| Web Programming with Python and JavaScript | edX-HarvardX | 2021 |
| Python Data Science | IIT-Madras | 2020 |
| Introduction to Bootstrap - A Tutorial | edX-Microsoft | 2018 |
| CCNA | Cisco | 2005 |
| Microsoft Ceritified Professional | Microsoft | 2005 |
| Redhat Professional | Red Hat | 2005 |

## Awards and Recognitions Secured

- Dr.R.Radhakrishnan award received from SRIT Alumni Association for "Academic Excellence and Contributions".

## Self-appraisal

Major Strengths:

1. Good learner & Motivator
2. Skillful in problem solving
3. Skillful in using Software

Major Weaknesses:
1. No Industrial Experience
2. postponing the less priority works
3. Impulsive

**Signature**