


FACULTY PROFILE

Name of the Faculty	R. RAJKUMAR	
Department	INFORMATION SCIENCE	
Qualification	B.E (ISE), M.Tech (CNE), Ph.D	
Designation	ASSISTANT PROFESSOR	
Area of Specialization	Computer Networks, CBIR	
Date of Joining Institution	01 – Aug – 2011	
Association with the Institution (Regular / Visiting / Adjunct / Contract)	Regular	
email – id	raj@rnsit.ac.in, rajkumar.manju@gmail.com	
Phone / Mobile Number(s)	080 - 28611880	
Experience in years	02 – Industry, 17 – Teaching, 08 – Research	

Educational Qualifications

Degree	Branch	Institution	Percentage with Class Obtained	Month / Year of Passing	University
UG: B.E	Information Science & Engineering	MSRIT, Bengaluru	74 FCD	Oct – 2001	Bangalore University
PG: M.Tech	Computer Network Engineering	BMSCE, Bengaluru	73 FCD	Nov – 2007	VTU, Belagavi
Ph.D: CSE	Computer Science	Research Center, RNSIT, Bengaluru	Awarded	Jun – 2020	VTU, Belagavi

Details of Work Experience(s)

Sl. No.	Designation	Organization	Duration
1	Assistant Professor	RNS Institute of Technology, Bengaluru - 98	Aug 2011 – till date
2	Senior Lecturer	PES Institute of Technology, Bengaluru - 85	Jul 2008 – Jul 2011
3	Senior Lecturer	Vivekananda Institute of Technology, Bengaluru - 74	Nov 2003 – Jul 2001
4	Software Engineer	V-Care Electronics, Bengaluru - 54	Oct 2001 – Oct 2003

Ph.D. Details

Thesis Title	<i>Image Retrieval using Relevant Features in Association with Annotations from WWW</i>
Supervisor Name	Dr. M V Sudhamani Dean – R&D (Engg.) Professor & Head Department of Information Science and Engineering RNSIT, Bengaluru – 560 098
Defense Adjudicator	Dr. Sudeb Das Gupta Professor & Head Department of Electronics and Communication Engineering Indian Institute of Technology, Roorkee Uttarakhand – 247 667
Defense Date and Venue	20th June 2020 R&D Centre, Department of CSE, RNSIT, Bengaluru - 98

SUBJECTS TAUGHT

- Database Management Systems
- Data Communications
- Object Oriented Programming Using C++
- Object Oriented Concepts – Java Programming
- Computer Organization
- Computer Networks
- UNIX and Shell Programming
- UNIX System Programming
- Advanced Digital Communications
- Wireless Mobile Networks
- Storage Area Networks
- Distributed Computing
- Internet of Things
- Mobile Application Development
- Web Mining

ACADEMIC ROLES AND RESPONSIBILITIES

@ RNS Institute of Technology, Bengaluru – 98: Since 2011 – till date

1. Technical Committee member for International Conference on Data Engineering and Communication Systems (ICDECS – 1) jointly organized by the Departments of CSE and ISE during Dec 30, 31 2011 at VIVANTA by TAJ, Bengaluru.
2. M.Tech Project Coordinator: Scrutiny, monitoring and coordination of PG Student projects during 2011 – 2018.
3. Technical chair for International Conference on Data Engineering and Communication Systems (ICDECS – 2) jointly organized by the Departments of CSE and ISE during Dec 28, 29 2015 at RNSIT, Bengaluru.
4. Evaluation Team member – University Examination Evaluation coordination for VTU, Belagavi, during 2014 – 2016. (UG & PG – Valuation and Revaluation).
5. Mobile Committee Chairman – College level during 2014 – 2016.
6. Discipline Committee Member – Department level since 2012.
7. Mock LIC Inspection Committee Member – Convener (2016 – 17 & 2017 - 18).
8. Academic stock & improvement Committee (ASIC) Member (2016 – 2017).
9. Hostel Vigilance Committee – Boy's Hostel (2018 – 19).
10. Mentor for students (currently 24 students).
11. Internship Coordinator for UG students under CBCS Scheme since 2018.
12. Criterion coordinator during NAAC – 2017 accreditation.
13. Member of Department Advisory Board, Department of ISE, RNSIT since 2015.
14. Criteria 3 coordinator during NBA – 2018 accreditation.
15. Department Timetable coordinator – Since 2019.

16. Member of Organizing Committee for International Conference on Data Engineering and Communication Systems (ICDECS – 3) jointly organized by the Departments of CSE and ISE during Dec 19, 20 2019 at RNSIT, Bengaluru.
17. Coursera – Online courses Campus wide Admin during pandemic and enrolled 2500+ students to 14000+ courses, 85000+ lessons and over 57000+ Hours of learning.

@ PES Institute of Technology, Bangalore – 85: During July 2008 – July 2011

- Member - Board of Studies, Department of Computer Science, PESIT (Autonomous), Bangalore.
- Corporate Training - IBM Employees for MS (Tech) programme under IBM – University of Mysore.
- Coordinator of Mission 10x Concept Center, Wipro at PESIT Campus.
- Certified Master Trainer for WIPRO Mission 10x Faculty Development Program.
- Chief Course Instructor for Database Management Course for 4th SEM Autonomous Scheme
- Chief guide for BITES (A Govt. of Karnataka undertaking non-profit organization) – beta version Website testing process.
- Coordinated in Examination Process Automation Package.
- Coordinated in setting up of Freescale Embedded Systems Laboratory at PESIT.
- Coordinated in setting up of Networking Laboratory under MODROBS, AICTE sponsored program at PESIT.
- Coordinated in setting up of Advanced Database Laboratory using Oracle 10g database at PESIT.
- Assisted in organizing a One Week Faculty Development Program sponsored by VGST & VTU, Belgaum on Knowledge Technologies for Web during 22nd – 27th March 2010.

@ Vivekananda Institute of Technology, Bangalore – 74: During Nov 2003 – Jun 2008

- Deputy Chief Superintendent for VTU Examinations held during Dec/Jan 2007-08.
- Conducted extra-curricular activities in the department and assisted in campus placement.
- Developed office automation package, as a part of college automation along with payroll management.
- Formulating a new concept of Induction Programmes for faculty members and final year students for project development.
- Involved in the design and maintenance of College's new website been launched.
- Managing committees for development and schedules of staff workload and student activity management (mentor systems).

INDUSTRY EXPERIENCE

@V-Care Electronics, Bangalore – 54: During Oct 2001 – Oct 2003

- Software Developer with 2 years of experience. Interaction for specification & analysis with various clients' onsite and offsite. Developed skills like stress management, time management, interactive communication across different verticals, teamwork, etc., others include exhaustive coding, debugging and testing.
- Projects developed: Application developed using VB 6.0, Database and Embedded Systems using C:
 1. Scheduler of Animal Weighing Operations – A research based tool developed for Orchid Pharmaceuticals Ltd, Chennai.

2. Embedded Mobile Battery Charge Analyzer - Hardware based Testing System developed for Rajamane Telectric Ltd., Bangalore.
3. Productivity Monitoring System – Embedded with CNC Machine to monitor about 42 proximity sensors and record downtime for multi-fault systems at ITC Filtrona, Bangalore.
4. PC based Simulation Unit – ABB Ltd., Bangalore.
5. Automated Wireless Alarm Systems – 3G Wireless, Bangalore.
6. Embedded Smart Card - Access Control and Attendance Package – Online Instruments, Bangalore.

RESEARCH WORK DETAILS

Publication(s) (National/International Journals)

- [1] R Rajkumar and Dr. M V Sudhamani, *Semantic Annotations of Medical Images from Radiological Reports and Retrieval using CBIR Techniques – A Survey*, International Journal of Applied Engineering Research, ISSN: 0973 - 4562, Vol. 10 No.86, 2015.
- [2] R Rajkumar and Dr. M V Sudhamani, *Crawler for Image Acquisition from World Wide Web*, International Journal of Computer & Organization Trends (IJCOT), ISSN: 2249-2593 – Volume 7, Issue 1 – Jan to Feb 2017.
- [3] R Rajkumar, Dr. M V Sudhamani, *Retrieval of Images using Combination of Features as Color, Color Moments and Hu Moments*, Advances in Image and Video Processing, Open Access – UK Journal, DOI: 10.14738/aivp.75.7208, Volume 7 No 5, October (2019); pp: 9-21, 2019.
- [4] R Rajkumar, M V Sudhamani, *Development of Retrieval System using Color from Multi-Segments and Shape features from Images as Combination*, International Journal of Engineering and Advanced Technology (IJEAT), DOI: 10.35940/ijeat.A1291.109119, ISSN: 2249 – 8958, Volume-9 Issue-1, October 2019.(Scopus Indexed Journal)
- [5] R Rajkumar, M V Sudhamani, *Content based Image Retrieval System using Combination of Color and Shape Features, and Siamese Neural Network*, International Journal of Innovative Technology and Exploring Engineering, DOI: 10.35940/ijitee.B1053.1292S19, ISSN: 2278-3075, Volume-9 Issue-2S, December 2019.
- [6] R. Rajkumar, Dr. M V Sudhamani, *Image Retrieval system using Residual Neural Network in a Distributed Environment*, International Journal of Recent Technology and Engineering, DOI:10.35940/ijrte.F9811.038620, ISSN: 2277-3878, Volume-8 Issue-6, March 2020.

Paper(s) Presented (National/International Conferences)

1. R Rajkumar and Dr. M V Sudhamani, *Semantic Annotations of Medical Images from Radiological Reports and Retrieval using CBIR Techniques – A Survey*, 2nd International Conference on Data Engineering and Communication Systems (ICDECS 2015), Bengaluru, Dec 28 & 29, 2015.
2. R Rajkumar and Dr. M V Sudhamani, *Crawler for Image Acquisition from World Wide Web*, 3rd International Conference on Advances in Computer & Communication Engineering (ACCE – 2017), Bengaluru, May 5-6, 2017.
3. R Rajkumar and Dr. M V Sudhamani, *Content Based Image Retrieval using Heron Filtering, Fast BEMD and Gray level features*, 1st IEEE International Conference on Advances in Information Technology (ICAIT – 19), Chikamagaluru, IEEE Digital Xplore DOI: 978-1-7281-3241-9/19, July 25-27, 2019. (Scopus Indexed).
4. R Rajkumar and Dr. M V Sudhamani, *Content based Image Retrieval System using Combination of Color and Shape Features, and Siamese Neural Network*, 3rd International Conference on Data Engineering and Communication Systems (ICDECS 2019), Bengaluru, Dec 19-20, 2019.

TALKS DELIVERED

1. A lecture on “UNIX System Programming” at Bahubali College of Engineering on 5th May 2012.
2. Delivered a technical seminar on “GNU Debugger (gdb)” at 3 – days FDP on Fundamentals and Advanced concepts of UNIX by Departments of CSE, ISE & MCA, RNSIT during 19 – 21 July 2016.
3. Talk on “MOOCs – A walk Through” as a part of Induction Program for first year ISE students, RNSIT, Bengaluru, on 1st Dec 2020.
4. Technical talk on “Object Oriented Programming using C++”, Pre-Placement Training program for 3rd year ISE students, RNSIT, Bengaluru, during 9th Dec 2020.
5. Technical talk on “Database Management Systems”, Pre-Placement Training program for 3rd year ISE students, RNSIT, Bengaluru, during 10th Dec 2020.

Session chair(s) at National / International Conferences / Symposia

1. Session chair for paper presentation for One Day National Level Technical Symposium “ADVAYA – 2013” at Shirdi Sai Engineering College, Anekal, Bengaluru – 562106 on 31st Oct 2013.
2. Recruitment Committee for DRDO – Part of the recruitment committee for selection to the Junior Scientist for DRDO in the year 2011.

Workshops/ Seminars / FDPs/Training Programmes - Attended

1. Two day FDP on *Medical Data Mining and Image Processing (WMDM IP-2012)*, at Reva Institute of Technology and Management, Bengaluru during 27th & 28th January 2012.
2. Three day FDP on *MATLAB and its applications to image processing and communication* organized by Department of E&C, RNSIT during 28th – 30th January 2013.
3. Two days Faculty Development Programme on *Programming in C and Data Structures* at RNSIT held during 24th & 25th, July 2014.
4. Three day workshop on *Research Methodology* organized by VTU, Belagavi at Shreedevi Institute of Technology, Mangalore during 9th – 11th September 2014.
5. Five days FDP on *Hands-on Training on current computing tools* organized by Department of ISE, SJBIT, Bengaluru during 27th – 31st January 2015.
6. Expert talk on *Technical competency to be incorporated among students* by Mr. Rajendra, Head, Campus Hiring Team, Accenture India Pvt. Ltd, Bengaluru, organized by Departments of CSE and ISE, RNSIT on 6th May 2016.
7. Three days FDP on *Fundamentals and Advanced concepts of UNIX* organized by Department of CSE, ISE & MCA, RNSIT during 19 – 21 July 2016.
8. Two day workshop on *IEEE SmartTech Workshop* conducted by IEEE Bangalore Section at Vivanta – Taj, MG Road, during 18 – 19 November 2016.
9. One day FDP on *ARM Processors and Programming* organized by Department of CSE& ISE, RNSIT on 30th January 2017.
10. One day FDP on *OOP with Java* organized by Department of CSE& ISE, RNSIT on 31st January 2017.
11. Technical talk on *Game Theory Meets Computer Science* by Prof. Y Narahari, Professor, Department of CSA, IISc, Bengaluru, organized by Departments of CSE and ISE, RNSIT on 8th April 2017.
12. Two day FDP on *Database Application Development* organized by Departments of ISE & CSE, RNSIT during 2nd – 3rd August 2017.
13. Technical talk on *Introduction to JDBC & Create a Front End using JAVA* by Mr. Kunal Kumar Software Development Manager, Oracle, Bengaluru, organized by Departments of CSE and ISE, RNSIT on 07th Oct 2017.
14. Expert talk on *Responsibility of an Engineer in the society* by Mr. Prashanth Ganesh, Team Lead, Zeta Global, Chennai, organized by Departments of CSE and ISE, RNSIT on 5th Feb 2018.

15. An Expert lecture on *Cyber Crime and Cyber Laws - Awareness Program* by Mr. S. Badrinath, DySP, Crime Division in Criminal Investigation, Department of Police of Karnataka Police Services, Bengaluru, organized by Departments of ISE & CSE, RNSIT on 10th Feb 2018.
16. Technical talk on *Data Science and its futures* by Mr. Bhupesh Daheria CEO, AEGIS School of Data Science, Mumbai, organized by Departments of ISE & CSE, RNSIT on 26th Feb 2018.
17. An expert lecture on *Compiler Design - An evolutionary view* delivered by Prof. Y N Shrikant, Professor Department of CSA, IISC Bengaluru, organized by Departments of ISE & CSE, RNSIT on 12th Mar 2018.
18. Two day workshop on *Artificial Intelligence and Machine Learning* by Mr. Sunil S, Chief Architect, Valley Boot Camp, Bengaluru, organized by Departments of CSE & ISE, RNSIT during 6th - 7th April 2018.
19. Technical talk on *Basics and Application of Machine Learning into day's real world* by Dr. Puneetha Bhat, Group Manager, IBM, Bengaluru, organized by Departments of CSE & ISE, RNSIT on 17/04/2018.
20. Three day FDP on *Machine Learning* organized by Departments of CSE & ISE, RNSIT during 19th – 21st July 2018.
21. Two days FDP on *Web Technology and its Applications* organized by Departments of ISE & CSE, RNSIT during 23rd& 24th July 2018.
22. Technical Talk on *Query Processing* by Prof. Jayant R Harista Professor Department of CSA, IISc Bengaluru, organized by Departments of ISE & CSE, RNSIT on 10th Aug 2018.
23. One day IEEE Symposium on *Deep Vision.AI* by IEEE Computer Society, Bangalore Section, at Hotel Sterlings Mac, Old Airport Road, Opposite Leela Palace, Bangalore on Nov 24th, 2018.
24. One day Online Conference on *AWS Innovate with theme on Machine Learning and AI Edition* by Amazon Web Services, USA on Feb 14th, 2019.
25. A specialized talk was delivered on *Recent Trends in Software Engineering - An Industry Perspective* by Mr. Ajay Balamurugadas, Associate Vice President, Qapitol QA, Bengaluru organized by Departments of ISE & CSE, RNSIT on 29th April 2019.
26. Three day IEEE *International Conference on Advances in Information Technology (ICAIT – 19)*, AIT, Chikkamagaluru, July 25-27, 2019.
27. Technical seminar on *Business Analytics and Predictive Analytics* by Mr. Vimal M Shetty, Project Consultant, NIT Tiruchy, organized by Departments of ISE & CSE, RNSIT on 25/8/2019.
28. Two day – 3rd *International Conference on Data Engineering and Communication Systems (ICDECS-2019)*, RNSIT, Bengaluru, Dec 19-20, 2019.
29. Handson Workshop on *Data Science using Python* by Dr. C. P. Ravi Kumar, Director of Talent Development, Texas Instruments, organized by Departments of CSE and ISE, RNSIT in association with BITES, Bengaluru on 19th Jan 2020.
30. AICTE Recognized One Week Faculty Development Programme on *Internet of Things*, Conducted by Computer Science and Engineering Department, NITTTR, Chandigarh from 10/04/2020 to 14/04/2020.
31. Attended a virtual Workshop on *Effective Online Engineering Education: Tips & Tricks* organized by IEEE Bangalore Section and IEEE SIGHT, Bengaluru on 26th April 2020.
32. Webinar on *Effective conduct of Online classes* organized by Department of Electrical and Electronics Engineering, SECE, Coimbatore on 8th May 2020.
33. Technical webinar on *Data Visualizations using Python Programming*, by INDO-UK Confederation of Science, Technology & Research, London, UK in association with International Association of Professional & Fellow Engineers, USA, Dated 9th May 2020.
34. Attended 3-days Webinar series on *Satellite and Automation* organized by GSSSIETW IEEE Student Branch, IEEE Bangalore Section and CAS Bangalore Chapter during 11th to 13th May 2020.
35. Online workshop on *Free MOOC to complement Engineering Education* organized by IEEE SIGHT and IEEE Bangalore Section on 13th May 2020.
36. Five days Faculty Development Programme on *OBE & its Impact on Accreditation Process* organized by RVCE, Bengaluru under AICTE Sponsored Share & Mentor Institutions (Margdarshan) Scheme during 06th - 10th July 2020.

37. One week Online FDP on *Exemplary Practices in Teaching-Learning and Evaluation of Courses in Computer Science & Information Technology* jointly organized by Visvesvaraya Technological University's Centre for Postgraduate Studies, Kalaburgi and Indian Institute of Information Technology, Allahabad, during 03rd - 07th August 2020.

PERSONAL DETAILS

Date of Birth : 14th June
Gender : Male
Marital Status : Married
Address : #314, 6th Main Road, 5th Cross,
Jnana Bharati BDA Layout, I Stage,
Valagerehalli, RVCE Post,
Bengaluru – 560 059