

Government Arts college (Autonomous), Coimbatore – 18
Performance - Teacher Appraisal Report

A. General information :-

- a) Name : **Dr. R. A. ROSELINE**
- b) Address (Residential) : No: 4, Nethaji nagar,
Nanjundapuram Road,
Coimbatore-641036.
Ph: 9443683150
Mailid: roselinera@yahoo.com
- c) Designation : Associate Professor
- d) Department : Computer Applications
- e) Date of Birth : 13.12.1971
- f) Area of Specialization : Wireless Sensor Networks

B. Academic Qualifications

| Exam passed | Board/University | Subjects | Year | Division/ Grade/Merit etc. |
|---------------------------------------|---|---|-------------|---|
| High School | Board of secondary Education | Tamil, English, Maths, Science, History & Geography | 1987 | I Class with Distinction |
| Higher secondary or Pre-degree | Board of Higher secondary Education | Maths, Physics, Chemistry, Biology | 1989 | I Class with Distinction |
| Bachelor's degree(s) | B.Sc., Bharathiar University, Coimbatore. | Computer Technology | 1992 | I Class with Distinction |
| Master's degree(s) | M.Sc., Bharathiar University Coimbatore. | Computer Science | 1994 | I Class with Distinction |
| Research degree(s) | 1) M.Phil Periyar University, | Computer Science | 2007 | Awarded |
| | 2) PhD Bharathiar University Coimbatore-14. | Computer Science | 2015 | Awarded |

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|---|---------------------------|--|-------------|---|
| <p>Others (Degrees, Diplomas) Certificates etc.</p> <p>Account Test For Executive Officer</p> | <p>-----</p> <p>TNPSC</p> | <p>Departmental Exam</p> <p>7th Aug 2012 Published</p> | <p>2012</p> | <p>Government of Tamilnadu - May 2012</p> |
|---|---------------------------|--|-------------|---|

C. Research Experience & Training

| Research Stage | Title of work/Thesis | University where the Work was carried out |
|---|--|---|
| M.Phil | A Study on the Adhoc On-demand Distance Vector Routing Protocol and performance comparison of AODV with Mobile Adhoc Networks (MANET) Routing protocols. | Periyar University, Salem. |
| Ph.D. | Environment monitoring using Energy efficient Routing algorithm in Wireless Sensor and Actor Networks | Bharathiar University Coimbatore-14. |
| Post-Doctoral | _____ | |
| Publications (give a list separately) | Please Refer Appendix - A | |
| Research Guidance (give names of students guided successfully) | Please Refer Appendix - B | |
| Training (please specify) | - | |

D. Research Projects carried out

| Title of the project | Name of the Funding Agency | Duration | Remarks |
|---|--|----------|-----------|
| “Energy Efficient routing in Wireless Sensor Networks for Pollution Monitoring”. | UGC MRP- 3868/11 (MRP/UGC-SERO) dated August 2012 | 2 yrs | Completed |

E. Seminars, Conferences, Symposia Workshops etc., Attended:

| Name of the Seminar/ Conference/Symposia Workshop,etc. | Name of the Sponsoring Agency | Place and Date |
|--|-------------------------------|----------------|
| Please Refer Appendix - C | | |

F. Teaching Experience:

| Courses Taught | Name of University/ College/Institution | Duration |
|--|---|----------------------|
| i) U.G. (B.A., / B.Sc., etc. Pass) (B.A./ B.Sc. etc., Hons.) | Govt.Arts College, Coimbatore | 29.10.99 till date |
| ii. PG (M.A./M.Sc./MCA etc) | Govt.Arts College, Coimbatore | 29.10.99 till date |
| iii. M.Phil | Govt.Arts College, Coimbatore | June 2007 till date |
| iv. Ph.D., | Govt.Arts College, Coimbatore | March 2015 till date |
| v. Others (if any) | --- | --- |

Total Teaching experience

- a) Under-Graduate (Pass) : 25 Years
- b) Under-Graduate (Hons) : ----
- c) Post-Graduate : 24 Years

G. Innovations/Contributions in Teaching:-

| | | |
|--|---|--|
| a) Design of curriculum | : | Designed syllabus for B.Sc(CS), BSc(IT), BCA., MSc(SS) and M.C.A., Courses |
| b) Teaching methods | : | Lecturing, , educational quiz, group discussions, seminars. Teaching through A/V aids, Industrial visits and training. |
| c) Laboratory experiments | : | Experiments based on problems solving ability in accordance with the syllabus , Questionnaires and conducting viva-voce. |
| d) Evaluation methods | : | Tests, seminars, problem solving experiments, Paper presentation, Attentiveness of the student is periodically watched, Problem solving Exercises, Projects. |
| e) Preparation of resource material including books, reading materials, laboratory manuals etc. | : | 1. prescribed text books and reference books 2. E-material for MCA syllabus |
| f) Remedial Teaching/Student Councelling (academic) | : | Special coaching classes, Identifying students' problems, helping them in solving problems and counseling. |
| g) Any other | : | Periodical counseling for career enrichment to the students of the Department. |

H. Extension Work/Community Service:-

a) Please give a short account of your contribution to:

- i) Community work such as values of National integration, secularism, Democracy, socialism, humanism, Peace, scientific temper, flood or Drought relief, small family norms etc.,
- ii) National Literacy Mission
- :
- Creating awareness about the basic values, Interpersonal skills, social skills and Prosocial behaviour among students and members in the community.
- Creating awareness about the importance and value of literacy.

- b) Positions held/Leadership role with Extension Work and National Service Scheme (NSS) or (NCC) or any other similar activity. : Resource person for training the school teachers , college teachers

I. Participation in Corporate Life:-

Please give a short account of your contribution to :

- a) College/University/Institution activities : Supporting the Principal in academic and administrative Departmental activities, Maintaining Discipline in the campus, Motivating the Students to join extra curricular Activities.
- b) Co-curricular Activities : Conducting technical events and cultural activities
- c) Enrichment of Campus Life (hostels,sports,games,cultural Acitivities) : Assisting the Principal, Colleagues and students to enrich the campus life through cultural
- d) Students welfare and Discipline : Periodical counselling to the students, their Parents and family members
- e) Membership/Participation in Bodies/ Committees on Education and National Development : Anti ragging committee member
- f) Professional Organization of Teachers. : ----
- g) Members of professional bodies, : Life member of Indian Science Congress
- h) Editorship of journals : -----
- i) Any other information : 1)E-goverence nodal officer of the college,SPOC of TCS-ION

**Signture of the Teacher
(Dr.R.A.ROSELINE)**

APPENDIX A

LIST OF PUBLICATIONS

A) International Conferences

[1] R.A.Roseline, Dr.P.Sumathi, "Local Clustering and Threshold Sensitive Routing Algorithm for Wireless Sensor Networks", in the IEEE sponsored International Conference on Devices Circuits and Systems(ICDCS'12),March 2012 (*Available online at ieeexplore.com*).

[2] R.A.Roseline and Dr. P.Sumathi "A Decentralised Routing Algorithm for Time Critical Applications using Wireless Sensor Networks " in Advances in Computing and Information Technology",Springer(pg125-133) (*Available online at springerlink.com*).

B) International Journals

[3] R.A.Roseline and Dr. P.Sumathi, "Energy Efficient Routing Protocols and Algorithms for Wireless Sensor Networks", Global Journal of Computer Science and Technology, December 2011 (ISSN : 0975-4350).

[4] R.A.Roseline and Dr. P.Sumathi ,"Pollution monitoring for healthy environment using integrated Wireless Sensor Networks and Grid Computing ", Journal of Global Research in Computer Science Volume 3, No 1, January 2012 (ISSN- 2220-371X).

[5] R.A.Roseline and Dr. P.Sumathi, " Fire Monitoring and Extinguishing Algorithm using Wireless Sensor and Actor Networks", The International Journal of Advanced Smart Sensor Networks(IJASSN), Volume 2,No 4, Oct 2012.

[6] R.A.Roseline , M.Devapriya and Dr.P.Sumathi "Pollution Monitoring using Sensors and Wireless Sensor Networks : A Survey", International Journal of Application or Innovation and Engineering and management , August 2012) .
(ISSN : 2319-4847) (**Funded by UGC**).

[7] R.A.Roseline , Dr.M.Devapriya and Dr.P.Sumathi , "Pollution Monitoring using energy efficient routing in Wireless Sensor Networks" , in International Journal of Emerging Trends and Technology in Computer Science (IJEERT), (ISSN : 2278-6856) (**Funded by UGC**).

[8] R.A.Roseline and Dr. P.Sumathi , "Solar Power for Wireless Sensor Networks in Environment monitoring Applications-A Review", in International Journal of Scientific Research Publications, (ISSN 2250-3153).

- [9] R.A.Roseline and Dr. P.Sumathi, "A Review on Clustering Techniques for efficient routing in Wireless Sensor Networks" in International Journal of Information Technology, (ISSN : 2321-5976).
- [10] K.Sammal And R.A.Roseline " Wireless Sensor Networks and Its Application, Platforms, Standards and Tools" International Journal of Computer Trends and Technology (IJCTT) – volume 4 Issue 8 August 2013(ISSN: 2231-2803)
- [11] Ms. S. Elizabeth Amalorpava Mary, Dr.R.A.Roseline *2 "Survey on Extracting High Utility Item Sets from Transactional Databases "International Journal of Computer Trends and Technology (IJCTT) – volume 25 Number 3 – July 2015(ISSN :2231-2803)
- [12] L.Ramesh,R.A.Roseline2,"Survey on Cloud Computing Security and Data Integrity Auditing Schemes in Cloud Platform" International Journal of Computer Sciences and Engineering Vol.-6, Issue-7, July 2018 (E-ISSN: 2347-2693)
- [13] V.I.SEMMALAR1 ,R A Roseline "Mining Competitors and Unstructured Datasets" International Journal of Modern Electronics and Communication Engineering (IJMECE Volume No. - 6, Issue No.–4, July, 2018)(ISSN: 2321-2152)
- [14] L.Ramesh, R.A.Roseline, "A Survey on Cloud Computing Security and Data Integrity Auditing Schemes in Cloud Platform"International Journal of Computer Sciences and Engineering, Vol.6(7) , , Jul 2018 ,E-ISSN: 2347-2693
- [15] L.Ramesh, R.A.Roseline,"Secure Data Sharing Of Sensitive Medical Record (Phr) In the Cloud" International Journal of Innovative Technology and Exploring Engineering (SCOPUS INDEXED), Volume-8 Issue-10 ,August 2019, ISSN:2278-3075
- [16] L.Ramesh, R.A.Roseline,"New QR-Code based encryption algorithm for secure medical data in cloud storage"Journal of interdisciplinary and multidisciplinary Research, Volume-XII, November 2019, ISSN:1936-6264
- [17] L.Ramesh, R.A.Roseline,"An Implementation of New QR based encryption algorithm for secure medical data in cloud storage"International journal of engineering and advanced technology(SCOPUS INDEXED) Volume-9 Issue-2,December 2019, ISSN:2249-8958
- [18] L.Ramesh, R.A.Roseline,"A LITERATURE SURVEY ON OPTICAL IMAGE ENCRYPTION TECHNIQUES"The International journal of analytical and experimental modal analysis, Volume XII, Issue I January 2020, ISSN NO: 0886-9367
- [19] L.Ramesh, R.A.Roseline,"An Implementation of Enhanced Image Encryption Algorithm by using DRPE-FFT and QR Code for secure Medical Data in Cloud Storage"Indian journal of Natural Sciences, UGC approved,Vol 10 Issue 59,April 2020, ISSN:0976-0997
- [20] SEMMALARV.I, R.A.Roseline,"Survey of Recent Technologies Used In Precision Agriculture"International journal of advanced engineering science and information technology, Vol.5(9), MAY 2022, E-ISSN: 2349-3216

[21] Semmalar.V.I, R.A.Roseline, "Smart Farming using Internet of Things: A Review", National Conference on Cybersecurity and Digital Forensics for Society, Vol -1, OCT 2022, ISSN-978-93-91347-26-0

[22] Semmalar.V.I, R.A.Roseline, "Survey of Smart Farming Techniques Using Datamining and Machine Learning Approaches" IJRAR- International Journal of Research and Analytical Reviews, Vol.10(3), JULY 2023 ISSN N0-2348 - 1269

APPENDIX B

IV. M.Phil Scholars details (only who have completed from 2018 -19-Till date)

| Name of the Scholar | Date of <u>M.Phil</u> registration | Name of the University | Date of <u>M.Phil</u> degree awarded | Guide Name & Address | Title Of The Dissertation |
|------------------------|------------------------------------|------------------------------------|--------------------------------------|---|---|
| P.RUBA | Sep 2012 | Bharathiar University, Coimbatore. | 29.06.2015 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | A Study Of Confidential Data Discovery And Dissemination Using Aadv Protocol In Wireless Body Area Networks |
| V.SOWNDARRAJAN | Sep 2012 | Bharathiar University, Coimbatore. | 29.06.2015 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | A Study Of Reliable Communication In Large Scale Wireless Sensor Networks Using Ant Based Protocol |
| R.RAMESHKUMAR | Sep 2013 | Bharathiar University, Coimbatore. | 5.4.2016 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | A Study on Improving The Privacy And Accuracy Of The Storage Node In Military Ad-Hoc Networks. |
| D.NANDHINI | Sep 2013 | Bharathiar University, Coimbatore. | 22.12.2014 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | A Study Of Effective Temporal Predicate Analysis For Continuous Secure Data Aggregation In Wireless Sensor Networks |
| S.ELIZABETH AMALOPRAVA | Nov 2014 | Bharathiar University, | 5.4.2016 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, | A Study on Enhanced μ -Growth ++ |

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|--------------|----------|--|------------|--|---|
| MARY | | Coimbatore. | | Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | Algorithm For Mining High Quality Item Sets From Transaction Of Databases |
| R.NANDHINI | Sep 2015 | Bharathiar University, Coimbatore. | 09.03.2018 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | Text Categorization Using Enhanced Knn With Term Frequency Inverse Document Frequency |
| D.MATILDA | NOV2015 | Bharathiar University, Coimbatore. | 26.07.2021 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | ENHANCED PEER CLUSTERING TECHNIQUE TO PROLONG NETWORK LIFETIME IN WIRELESS SENSOR NETWORKS WITH DYNAMIC MOBILE SINK PATH DETERMINATION |
| V.I.SEMMALAR | OCT2017 | Bharathiar University, Coimbatore. | 22.02.2019 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | MINING COMPETITORS FROM LARGE UNSTRUCTURED DATASETS OF ONLINE REVIEW FOR PRODUCTS USING ENHANCED C-MINER ALGORITHM |
| T.ARTHI | OCT2018 | Bharathiar University, Coimbatore. | 02.03.2020 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | OPTIMIZATION BASED ON HYBRID GENETIC ROUTING AND SCHEDULING SCHEME WITH ROBUST TRANSMISSION IN WIRELESS NETWORKS |

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|-----------|---------|------------------------------------|------------|---|---|
| T.G.GANGA | OCT2019 | Bharathiar University, Coimbatore. | 20.10.2021 | Dr.R.A.Roseline, M.Sc.,M.Phil., Ph.D, Associate Professor, Post Graduate And Research Department Of Computer Applications, Government Arts College, Coimbatore. | ENHANCED MAINTENANCE IN SECURE AND ENERGE AWARE ROUTING PROTOCOL FOR WIRELESS SENSOR NETWORKS |
|-----------|---------|------------------------------------|------------|---|---|

APPENDIX C

| S.No. | Name of the Event | Date | Institution | Topic |
|--------------|--------------------------|------------------------------------|---|--|
| 1 | Workshop | 1.2.2018 to 2.2.2018 | Bharathiar University | Data analytics with R |
| 2 | Seminar | 15 .2.2017 to 16.2.2017 | ICT Acadamy, PSG College of Arts, Coimbatore | Introduction to BigData Analytics |
| 3 | Conference | 28.11.2017 to 4.12.2017 | NCM at Melbourne, Australia | Conference on Contemporary issues in Computer Science |