Faculty Vitae

Name of the Faculty					
Dr. T.R.Rangaswamy					

Education					
	Degree	Discipline	Institution		Year
UG	BE	**Electrical & Electronics**	Madras University (GCT)		1977
PG	ME	**Applied Electronics**	Bharathiyar University (CIT)		1985
PhD		**Intelligent Controis**	Anna University (MIT)		2004

Academic experience					
Institution	Title	From	To		FT/PT
BSA University	Professor of Eminence / EIE	1/7/2016	30/06/2017		FT
BSA University	Professor / Dept of EIE	10/4/2013	30/6/2016		FT
BSA University	Professor & Head / Dept of EIE	21/03/2012	09/04/2013		FT
BSA University	Professor / Dept of IT	1/5/2011	20/3/2012		FT
BSA University and B.S.A. Crescent Engineering College,	Professor & Head / Dept. of IT	18/09/2006	30/04/2011		FT
B.S.A. Crescent Engineering College, Chennai	Professor & Head/ Dept of ICE	22/06/2000	17/09/2006		FT
Crescent Engineering College, Chennai	Asst. Professor/EEE	06/11/1992	07/07/1995		FT
Crescent Engineering College, Chennai	Lecturer/EEE	12/11/1990	05/11/1992		FT

Certifications or professional registrations
Boiler Operation Engineers Certification(Generation Plant)

Membership in professional organizations

Life member in Institution of Engineers (India) (M 105165/7)

Life member in ISTE (LM 10091)

Life member in System Society of India (LM 940)

Life member in Instrument Society of India (ISOI), (LM 1089)

Life member in Computer Society of India (CSII), (LM 00173472)

Charted Engineer (India) by IE(I) 1994

Honors and awards

Produced Six PhDs.

Service activities (within and outside of the institution)

1. Recognized as Supervisor to guide scholars by B.S.A.University

2. Recognized as Supervisor to guide scholars by Anna University (Ref.No.04.141.05 (2006) to guide Ph.D/M.S (by Research) etc.

3. Recognized as Supervisor to guide scholars by Sathyabama University

List of Publications

Publications Details

International Journal

1. Dr. T.R. Rangaswamy, Ms. N.S. Bhuvaneswari and Ms. G. Uma,, "Adaptive And Optimal Control of A Non-Linear Process Using Intelligent Controller" Applied Soft Computing Journal Vol. 9, Issue No. 1, PP. 182-190, 2009

2. Bhuvaneswari N.S., Uma G., Rangaswamy T.R., "Neural Network with Dynamic Programming for Time-Optimal Control of Conical Tank Level" Control and Intelligent Systems Vol. 37, Issue No. 4, PP. 187-194, 2009

3. M. Sandhya, And T. R. Rangaswamy, "A Combined Approach of Elliptic Curve And Zero Knowledge Based Forward Secure Protocol" World Academy of Science Engineering and Technology Vol. 56, Issue No. -, PP. 847-852, 2009

4.	M. Sandhya, And T. R. Rangaswamy, "Buffer Overflow Prevention In Mobile Rfid Environment Using Train Algorithm" Journal of computing Vol. 2, Issue No. 7, PP. -, 2010

5.	Dr. T. R. Rangaswamy And Ms. M. Sandhya, "A Forward Secured Authentication Protocol For Mobile Rfid Systems" International Journal of Information Technology Vol. 4, Issue No. 2, PP. 549-533, 2011

6.	Dr.T.R.Rangaswamy And Mr. A.Selwin Mich Priyadharson, "Cascaded Fuzzy Controller Scheme For Combustion Control of a Utility Boiler Using Control Balance Model" International Journal of Electrical Engineering and Technology Vol. 2, Issue No. 2, PP. 42-53, 2011

7.	Dr.T.R.Rangaswamy And Mr. A.Selwin Mich Priyadharson, "Cascaded With Fuzzy Scheme For Combustion Of A Utility Boiler" CIIT International Journal of Artificial Intelligent systems and machine learning Vol. 3, Issue No. 4, PP. 210-216, 2011

8.	Sandhya, M. Rangaswamy , T.R, "Authentication Protocol For Mobile Enabled Supply Chain Managem Ent System" International Journal of Com put ers and Applications Vol. -, Issue No. -, PP. -, 2011

9.	Sandhya M., Rangaswamy T.R., "A Secure And Efficient Authentication Protocol For Mobile Rfid Systems" Journal of Digital Information Management Vol. 9, Issue No. 3, PP. 99-105, 2011

10.	Prakash, N & Rangaswamy, TR, 'Coverage Based Test Case Prioritization Technique for Regression Testing', CiiT International Journal of Software Engineering and Technology, vol. 4, no. 3, pp.100-104. (Impact Factor - 0.261), 2011.

11.	D. Najumnissa & T R Rangaswamy, "Detection And Classification Of Epileptic Seizures Using Wavelet Feature Extraction And Adaptive Neuro- Fuzzy Inference System" International Journal of Computational Engineering and Research (IJCER) Vol. 2, Issue No. 3, PP. 755-761, 2012

12.	D.Najumnissa & T.R.Rangaswamy, "Qualitative Assessment Of Epileptic Seizure Eeg Signals Using Wavelet Transforms" Journal of Applied soft computing Vol. -, Issue No.

-, PP. -, 2012

13.   S.Revathi And T.R. Rangaswamy, "Dynamic Route Shortening And Route Repairing Mechanism For Mobile Ad Hoc Networks" Journal of Computer Science Vol. 8, Issue No. 8, PP. 1212-1218, 2012

14.   Revathi S., Rangaswamy T.R., "Secured Optimal Adaptable Ad-Hoc Routing Protocol In Manet" European Journal of Scientific Research Vol. 73, Issue No. 1, PP. 62-72, 2012

15.   Mrs. T. Nagamalar & Dr. T.R. Rangaswamy, "Sleeping Cluster Based Medium Access Control Protocol For Wireless Sensor Networls" Journal of Computer Science Vol. -, Issue No. -, PP. -, 2012

16.   Prakash N., Rangaswamy T.R., "Multiple Criteria Based Test Case Prioritization For Regression Testing" European Journal of Scientific Research Vol. 84, Issue No. 1, PP. 36 - 45, 2012

17.   Mr.P.Gnanasekaran & Dr.T.R.Rangaswamy, "Node Db Level Based Stable Qos Routing Protocol For Mobile Ad-Hoc Networks" European Journal of Scientific Research Vol. 73, Issue No. 3, PP. 362-374, 2012

18.   Prakash, N & Rangaswamy TR, 'Multiple Criterion Based Test Case Prioritization', European Journal of Scientific Research, vol.84 no.1, pp.36 – 45, 2012.

19.   S.Revathi & Dr.T.R.Rangaswamy , "Secured Optimal Adaptable Ad-Hoc Routing protocol in MANET" European Journal of Scientific Research, Vol.73, No.1, pp. 62-72, May 2012.

20.   S.Revathi & Dr.T.R.Rangaswamy, "Dynamic Route Shortening and Route Repairing Mechanism for MANET", Journal of Computer Science, ISSN 1549-3636, July 2012.

21.   D. Najumnissa, T.R.Rangaswamy, "Comparison Of Intelligent Computing Techniques For Classification Of Clinical Eeg Signals" The European Journal for Biomedical Informatics (EJBI) Vol. 9, Issue No. 2, PP. 42-51, 2013.

22. N. Prakash &T.R. Rangaswamy, "Weighted Method For Coverage Based Test Case Prioritization" Journal of Theoretical and Applied Information Technology Vol. 56, Issue No. 2, PP. 235-243, 2013

23. Gnanasekaran P., Rangaswamy T.R., "Boundary Level Based Stable Node-Disjoint Multipath Qos Routing Protocol For Mobile Ad Hoc Networks" Asian Journal of Scientific Research (AJSR) Vol. 6, Issue No. 4, PP. 726-735, 2013

24. Mr.P.Gnanasekaran And Dr.T.R.Rangaswamy, "Node-Disjoint Multipath Stable Qos Routing Protocol For Mobile Ad Hoc Network" Asian Journal of Scientific Research (AJSR) Vol. 6, Issue No. 4, PP. 726-735, 2013

25. N. Prakash &T.R. Rangaswamy, "Potentially Weighted Method For Test Case Prioritization" Journal of Computational Information Systems Vol. 9, Issue No. 18, PP. 7147-7156, 2013

26. S.Revathi & Dr.T.R.Rangaswamy ,"Efficient Flooding and Local Route Repair using Stable Connected Dominating Set for Mobile Ad Hoc Networks", Asian Journal of Scientific Research, Vol. 7, No.1, ISSN 1992-1454, pp.102-109, Jan 2014.

27. S.Revathi & Dr.T.R.Rangaswamy, "Secure Route Discovery using Opinion Based Method in MANET", International Journal of Computer Networks and Wireless Communications , ISSN 2250-3501, Vol. %, No.1, pp.442-446, Feb 2015.

28. P.Gnanasekaran and Dr.T.R.Rangaswamy, "Relative Link and Path Stability based Routing Protocol for Mobile Ad-hoc Networks" International Journal of Applied Engineering Research, ISSN 0973-4562 Volume 10, Number 16 (2015) pp 36602-36609

29. Nagamalar T and Dr.T.R.Rangaswamy, "Combined cluster based tree routing for energy efficient data collection in wireless sensor networks with mobile sink" International Journal of Applied Engineering Research,(IJAER) ISSN 0973-4562, Vol. 10 No.24(2015), pp.-44545 -44553.

30. Nagamalar T and Dr.T.R.Rangaswamy, "Mathematical model based energy efficient routing with prediction of mobile sink in WSN" International Journal of Advances in Natural and Applied Sciences ISSN: 1995-0772 EISSN: 1998-1090

31. P.Gnanasekaran and Dr.T.R.Rangaswamy, "Relative connectivity and link stability based routing protocol for mobile ad-hoc networks" ARPN, Journal of Engineering & Applied Sciences during February 2016.

32. M.S.Murshitha Shajahan, Dr.T.R.Rangaswamy and P.Abitha, "Multiloop Controller Design for Coordinated control of Thermal Power Plant" Middle-East Journal of Scientific Research ISSN 1990-9233; 2016.

National Journal

1. Sandhya M., Rangaswamy T.R., "Prevention Of Tampering Attacks In Mobile Radio Frequency Identification Environment" Information Technology Journal Vol. 10, Issue No. 10, PP. 1917-1925, 2011

2. Dr.T.R.Rangaswamy And Mr. A.Selwin Mich Priyadharson, "Balance Model Based Cascaded Pid Controller For Combustion Of A Power Plant Boiler" Instrument Society of India Department of Instrumentation Indian Institute of Science Bangalore Vol. 42, Issue No. 1, PP. 62-65, 2012

3. Dr.T.R.Rangaswamy And Mr. A.Selwin Mich Priyadharson, "Behavior Responses And Modelling Based Cascaded Pid Controller For Combustion Of A Utility Boiler" Indian Journal of Computer Science and Engineering Vol. 3, Issue No. 1, PP. 169-180, 2012

4. Prakash, N & Rangaswamy, TR, 'Weighted Method for Coverage Based Test Case Prioritization', Journal of Theoretical and Applied Information Technology, vol. 56, no.2, pp 235 – 243. (SNIP: 12231, ISPN: 19928645), 2013

5. Prakash, N & Rangaswamy, TR, 'Potentially Weighted Method for Test Case Prioritization', Journal of Computational Information Systems, vol.9, no.18, pp.7147–7156. ((SNIP: 10075, ISSN: 15539105), 2013

International Conference

1. Rangaswamy TR, Thyagarajan T, "Efficient control system for steel melting process", International Conf IA and C"95, Hyderabad, Jan 1995

2. Rangaswamy TR, Thyagarajan T Sanavullah M Y, Shanmugam J, "Expert system based thermal power plant controls and protection", Wand E -2001,Indore, Oct 1995

3. Rangaswamy TR, Thyagarajan T, Sanavullah M Y, "Dairy industry process automation", ICAUTO – 95, Chennai, Dec 1995

4. Rangaswamy TR, Thyagarajan T, Najumnissa Jamal D, "Opto-Stroboscopic Method of Measurement of Blood Flow rate," Intl. Conf. on Biomedical Engineering 2001, Chennai January 24 – 26, 2001

5. Rangaswamy TR, Shanmugam J, Mohammed KP, "Fuzzy based Steam flow controller for a Steam Turbine," Intl. Conf. on Trends in Industrial Measurement and Control (TIMA 2001), M I T, Anna University, Chennai, August 17 – 19, 2001

6. Rangaswamy TR, Shanmugam J, Mohammed KP, "Fuzzy based control system for an electric arc furnace," Intl. Conf. ISA 2001 Houston, September 10-12, 2001

7. Bhuvaneswari N S, Rangaswamy TR, Nagarajan S, "Neuro controller for power plant generator excitation system" Intl. Conf. on Control, Instrumentation Information and Communication (CIIC – 2001), Dept Applied Physics, University of Calcutta, Kolkatta 13-15 December 2001

8. Rangaswamy TR, Mohammed KP, Thyagarajan T, "Web Based Curriculum For Process Control and Automation, – A Case Study," Intl. Conf. on Technology Enhanced Teaching and Learning (TELT 2002), Crescent Engg College, Chennai December 18-20, 2002

9. Rangaswamy TR, Shanmugam J, Mohammed KP, "Optimal Performance Controllers for Utility Boilers," Intl. Conf. on Operation Research for Development (ICORD 2002), Anna University, Chennai December 27-30, 2002

10. Rangaswamy TR, Shanmugam J, Mohammed KP, Saleha Saiqa D, "Adaptive fuzzy based fuel flow controller for utility boiler," Intl. Conf. on "Digital Aided Modelling and Simulation (DAMS 2003) Coimbatore Institute of Technology, Coimbatore January 6 – 8 2003

11. Rangaswamy TR Shanmugam J Mohammed K P, "Adaptive fuzzy based for utility

boilers, " Intl. Conf. ISA EXPO – 2003, Houston, Texas, USA October 21, 2003

12. Rangaswamy TR, Shanmugam J and Mohammed KP, " Real time optimization of thermal power plant performance by using adaptive controllers," PEITSICON -2005 Kolkatta

13. Abdul Matheen R, Kumar S, Rangaswamy TR, "Modernization of control systems using intelligent controllers in power plant" PEITSICON – 2005, Kolkatta Dec 2005

14. Bharathi N, Rangaswamy TR, "Control of neutralization process using Neuro and fuzzy controller", IEEE Intl. Conf. IICPE, Chennai, 19-21 Dec 2006

15. Rangaswamy TR, "Intelligent Demand Based Cascaded Controller for Combustion of utility Processor" International Conference TIMA 2007 held at NIT Trichy 4-7 January 2007

16. Nagarajan S, Shanmugam J, Rangaswamy TR," Fault tolerent control of Interacting level process under sensor failure conditions using adaptive neurofuzzy observer", Intl. Conf. On Intelligence Systems & networks, Haryana, 23-25 Feb 2007

17. Bhuvaneswari NS, Uma G, Rangaswamy TR,"Neuro fuzzy Control of a Conical Tank level Process", ICMCS - 2007,Loyola College, Chennai, 1-3 Mar 2007

18. Nagarajan S, Shanmugam J, Rangaswamy TR, "Intelligent sensor failure detection in three interacting level process using adaptive neuro-fuzzy observer"' International Conference on Modelling and Simulation, organised by Coimbatore Institute of Technology, 27th to 29th August 2007.

19. T R Rangaswamy, " Behaviour Modeling Based Fuzzy Controller for Combustion Control of Utility Boiler", International Conference MS'07,Dec 3-5, 2007, India.

20. Dr.T.R.Rangaswamy and M.Sandhya, "A Framework for Embedding Sensor Data in Active Tags for RFID" Trends in Industrial Measurements & Automation (TIMA 2009), MIT, Anna University, Chennai

21. Dr.T.R.Rangaswamy and M.Sandhya," A Combined Approach of Elliptic Curve And

Zero Knowledge Based Forward Secure Protocol", International conference on Computer Communication and Network Security organized by World Academy of Science Engineering and Technology in Singapore.(9Aug, 2009)

22. Dr.T.R.Rangaswamy and M.Sandhya, 'A Framework for Estimating the Number of Tags in Variant Enhanced Dynamic Frame Slotted Aloha ', IEEE International Advance Computing Conference (IACC'09), Thapar University, Patiala,2009.

23. N. Prakash & Dr. T.R. Rangaswamy," Regression Test Case Prioritization Metrics for Object Oriented Programming", International Conference on Information Systems and Software Engineering organized by Meenakshi Sundararajan Engineering College, Chennai, DEC 2009.

24. Sandhya .M, Rangaswamy T.R. " A Study on the use of Mobile RFID for visually inspired People" International Conference on Data Management and Technology, Ghaziabad , New Delhi March 21, 2010.

25. Ms.D.Najumnisia & T.R.Rangaswamy," Detection and Classification of Epileptic Seizures using Wavelet Feature Extraction and Adaptive Neuro-Fuzzy Inference system" International Conference on Modeling ,Control, Automation and Communication, Velammal Engg College, Chennai, Dec 2010.

26. Rangaswamy T.R, Priyadharson A.S.M, "An Intelligent Supervisory System for Thermal Power Station" International Conference on Advances in Energy Conversion Technology" held at Manipal Institute of Technology, Manipal, January 7-10, 2010.

27. M. Sandhya, and T. R. Rangaswamy, "Quantitative Evaluation of Frameworks for Web Applications" 2010 International Conference on Software and Technology PP. -, 2010

28. N. Prakash & Dr. T.R. Rangaswamy," New Test Case Prioritization Technique for Regression Testing", International Conference on Multimedia Information Technology and Application organized by Korea Multimedia Society, High Level Commission for Information Technology, Government of Nepal, AUG 2010.

29. Priyadharson A.S.M., Rangaswamy T.R., "Energy Balance Model Based Fuzzy

Controller for Combustion of Utility Boiler" International Conference on Recent Advancements in Electrical, Electronics and Control Engineering, Dept of EEE, Mepco Schlenk Engineering College, Sivakasi,2011.

30. M. Sandhya, and T. R. Rangaswamy, "A Practical Approach for enhancing security in Mobile RFID Environment" International Conference on Furture Information Technology, Singapore, Sep 2011.

31. Ms. Revathi, Dr. T.R. Rangaswamy," Reliable and Continuous Service Access in Zone routing protocol", International Conference on Computer Science and Engineering held at Bangalore , Organised by I.I.M.T, Bhubaneswar, Oct-2011.

32. Prakash, N & Rangaswamy, TR, 'Modular Based Multiple Test Case Prioritization', Proceedings of 2012 IEEE International Conference on Computational Intelligence and Computing Research, Organized by the Dept of CSE, Tamilnadu Engioneering College, Coimbatore, pp.496-502. , 2012.

33. Ms.S.Paavai and Dr.T.R.Rangaswamy, "Power Aware Routing for Efficient Irrigation Management Systems" 2012 Third International Conference on Computing, Communication and Networking Technologies ICCCNT PP. -, 2012

34. S.Revathi & Dr.T.R.Rangaswamy, "Efficient Route Discovery using Stable Connected Dominating Set for MANET", World Conference on Information and Communication WICT 2012), IEEE Proceedings, Oct 12, 2012, pp. 763-761, 2012.

35. R Latha, T.R. Rangaswamy," Offline Credit Card Fraud Detection Using three level authentication" international Conference on 'Innovation in Engineering ang technology for Sustainable Development, at Bannari Amman Institute of Technology, Sep 2012.

36. M. S. Murshitha Shajahan, Dr.T.R.Rangaswamy," Intelligent Coordinated Control of Boiler Turbine Unit" International Conference on Industrial Engineering Science and Applications IESA 2014, NIT, Durgapur

37. T. Nagamalar, Dr. T.R. Rangaswamy, "Energy Efficient Cluster based Approach using Controlled Flooding for Data Collection in Wireless Sensor Networks with Multiple Mobile Sink" Industrial Instrumentation and Control 2015 (ICIC 2015), International

	Conference, College of Engineering, Pune, 28th and 30th May 2015.
38.	M. S. Murshitha Shajahan, Dr.T.R.Rangaswamy "Adaptive Boiler Turbine and Generator coordinated control system in Thermal Power Plant" Intl. Conf. on Trends in Industrial Measurement and Control (TIMA 2001), M I T, Anna University, Chennai

Recent professional development activities
Delivered a lecture on "Process Automation and Optimization" for the faculty members and research scholars organized.Submitted a project titled "Design, Develop and Simulation of Adaptive coordinated control in a Thermal Power Plant for Grid Disturbance to CPRI, Bangalore for 30 Lakhs in Dec 2016.