National Institute of Technology, Tiruchirappalli:

Performa for CV of Faculty/ Staff Members

Curriculum Vitae

Brief Profile:

Born on 6th August 1967 at Tiruchirappalli, TamilNadu. Under-graduated in Electrical and Electronics Engineering and subsequently Post-graduated in Computer Science and Engineering from Regional Engineering College, Tiruchirappalli, TamilNadu in the year 1990 and 1992 respectively. Then worked as Faculty on ad-hoc in the department of Electrical and Electronics Engineering during 1997-1999. and joined as Lecturer in EEE Department in 1999. Completed Ph.D. in the area of Differentiated Services from National Institute of Technology, Tiruchirappalli, TamilNadu in 2009. Area of interest are Computer Networking, Wireless Sensor Networks, Information Extraction and Web Services.

1. Name :   Dr.S.Sudha

2. Designation: Professor

3. Office Address: Department of Electrical and Electronics

4. Telephone (Direct) (Optional):

   Telephone :   Extn(Optional): 25003258

   Mobile (Optional):   9443329313

5. Email (Primary):   sudha@nitt.edu

   Email (Secondary) :   ssudha.nitt@gmail.com

6. Field(s) of Specialization: Computer Networking, Wireless Sensor Networks, Web
                                                    Services and Information Retrieval.

7. Employment Profile

Performa for CV of Faculty/ Staff Members

Job Title	Employer	From	To
Research Assistant & Research Associate	Principal, REC, Trichy	6.8.1990	25.9.1994
Faculty on contract basis (C.S.E. Dept.)	Principal, REC, Trichy	26.9.1994	27.6.1997
Lecturer on contract basis (E.E.E. Dept.)	Principal, REC, Trichy	28.6.1997	22.4.1999
Lecturer	Principal, REC, Trichy	23.4.1999	22.4.2004
Senior Lecturer	Principal, REC, Trichy	23.04.2004	June 2012
Associate Professor	Director, NITT	July 2012	Feb. 2018
Professor	Director, NITT	March 2018	Till date

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	NITT	2009		Computer Networks
M.E	RECT	1992	First Class	Computer Science and Engg.
B.E	RECT	1990	First class	Electrical and electronics Engg.
HSC	TamilNadu State Board HSC	1986	First Class	Maths, Physics, Chemistry and Biology
SSLC	TamilNadu State Board HSC	1984	First Class	Maths, Science and Social

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	Period
Class Committee Chairperson	EEE Department	2006, 2007, 2009 , 2010 ,
Convenor, Time- table Preparation	EEE Department	1999- 2004, 2009-2011
Convenor, Time-Table Preparation	Institution- for all departments	1991- 1993
Procurement of components and equipment's	EEE Department	1991- 1994
Faculty In-charge Procurement of components and equipment's	EEE Department	2010 -2015

Performa for CV of Faculty/ Staff Members

Ph.D and MS Admission Chairperson	EEE Department	1991-1994, 1997-2004, 2013-2015
Faculty In-charge of Curriculum and Syllabus revision	EEE Department	1998-2001, 2015
Department purchase –Common facility	EEE Department	2016
HoD	EEE Department	2018-2020
EEE Department Admission committee Faculty in-charge	EEE Department	2020
NBA Departmental committee Convenor	EEE Department	2021,2022
Library Advisory Committee, Chairperson	Institute Library	2021-till date
MSME, Institute Co-Ordinator	Institute	2021-till date

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
DC member	Anna University, Tiruchirappalli	2012	Till date
Ph.D. Examiner	Various universities	2015	Till date
BoS Member	Anna University affiliated Institutes	2021	Till date

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2014	Distinguished Alumni Award	NITT

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
NIL				

13. Details of Academic Work
      (i) Curriculum Development : UG, PG and Ph.D. Courses
      (ii) Courses taught at Postgraduate and Undergraduate levels : 7-9 courses
    (iii) Projects guided at Postgraduate level : 36 Nos

Performa for CV of Faculty/ Staff Members

(iv) Other contribution(s) : involved in various departmental activities

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Vehicle parking Guidance system using sensors	CETransE	2016	2019	completed
Information Extraction	BHEL, Trichy (Consultancy project)	2010	2015	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ CoSupervisor)	Year of Award
Ms. D.Umamaheswari	Investigation on Two-level Routing Techniques to Enhance the Lifetime of Clustered Wireless Sensor Networks	Supervisor	2021
Ms. M.Meenalochani	Investigations on Routing and Localization using Soft-Computing Techniques for Wireless Sensor Networks	Supervisor	2019
Mr. K.Rajbabu	Design and Development of Information Processing Methodologies for Unstructured Industrial Documents	Supervisor	2018
Ms. N.Hemavathi	Design, Development and Analysis of Novel Energy Efficient Clustering Algorithms for Wireless Sensor Networks.	Supervisor	2018
Ms.Chithra D Gracia	Certain Investigations on Prediction of web objects to minimize user perceived latency	Supervisor	2017

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
21-04-95 to 22-04-95	Workshop on Software Engineering	National	Participant	P.S.G. College , Coimbatore	TamilNadu, India

21-01-02 to 02-02-02	High Speed Networks	National	Participant	Anna University Chennai,	TamilNadu India
02-12-02 to 13-12-02	Architecture, programming and Applications of Digital Signal Processors	National	Participant	Regional Engineering College	Tiruchirappalli
22-1-04 to 23-1-04	National Workshop on Communication Protocol for Power System Automation	National	Participant	CPRI, Bangalore,	Karnataka, India
20- 7- 05 to 22- 7- 05	Genetic Algorithms for Engineering Optimization	International	Participant	Indian Institute of Technology, Kanpur	Uttar Pradesh, India
15-04-06	Environmental issues and Housekeeping	National	Participant	National Institute of Technology	Tiruchirappalli

12-6-06 to 16-6-0z	Microcontrollers and their Applications	National	Participant	National Institute of Technical Teachers Training and Research Institute	Chennai
22-12-06	Research directions in Information Technology and Applications	Natioonal	Participant	National Institute of Technology	Tiruchirappalli
30-03-07 & 31-03-07	Research Challenges in Wireless and Optical Communication Networks	National	Participant	Dept. of ECE, Anna University	Chennai
24-03-08 to 28-03-08	Capacity Building of women managers in Higher Education	National	Participant	Bharathidasan University	Tiruchirappllai

Performa for CV of Faculty/ Staff Members

29-04-09	One day National Workshop on Patent Information	National	Participant	Bharathidasan University, NIT-Trichy, TNSCST	Chennai.
29-04-11 to 30-04-11	Principles of Software Testing	National	Participant	CSE Dept., Anna University.	Chennai
09-05-11 to 21-05-11	Current Trrends in Information Retrieval with Research Perspective	National	Participant	AICTE sponsored Staff Development Programme,	PSG College of TechnologyCoimbatore.
06-12-13 to 07-12-13	Recent Trends in Wireless Sensor Networks	National	Participant	AICTE sponsoredNational Seminar	Avinashilingam University, Coimbatore.
10-10-14 to 11-10-14	Workshop on Video Analytics	National	Participant	AU-KBC Research Centre, Dept. of ECE. & IT(MIT Campus), Anna University	Chennai
16-10-15 to 17-10-15	Medical Devices and the Internet of Things (IoT)	International	Participant	IEEE Standards Association	Kristu Jayanti College, Hennur Rd, Bangalore
25-07-16 to 28-07-16	Analog, Power, Embedded Systems and Wireless (IoT) hands – onWorkshop	National	Participant	Texas Instrument, Bangalore and STEPS Knowledge Services Pvt.Ltd	NIT, Tiruchirappalli
28-08-16 to 31-08-16	Advanced Sensors and Actuators	National	Participant	IIT Kanpur	Uttar Pradesh, Kanpur
11-05-20 to 15-05-20	E-content development (online)	National	Participant	NITTTR, Chennai	Chennai
23-2-19 To 25-02-19	Introduction to Machine learning and Deep learning - with applications to Engineering Systems	National	Participant	IIT Bombay	Mumbai

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

National Institute of Technology, Tiruchirappalli:

Performa for CV of Faculty/ Staff Members

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Workshop on C++ programming for PG students under TEQIPTribal Development	Local	30th November & 1st December 2006.	Co-ordinator	NIT, Tiruchirappalli
Workshop on Personality Development for UG students under TEQIPTribal Development	Local	19th – 20th January 2007.	Co-Coordinator	NIT, Tiruchirappalli
Workshop on Microprocessor, Microcontroller and their applications for Final year students and Teachers of Polytechnic Colleges under TEQIPCommunity Service.	Local	14th – 15th December 2007	Co-Coordinator	NIT, Tiruchirappalli
Workshop on Fundamentals of Computers conducted under TEQIP in EEE	Local	2007	Resource person	NIT, Tiruchirappalli
Workshop on Power Electronics, Renewable energy Conversion Systems conducted under MHRD-AICTE in EEE	Local	June 2008.	Resource Person	NIT, Tiruchirappalli
Two week ISTE Workshop on Introduction to Research Methodologies Conducted by IIT Bombay, Mumbai	National	25th June- 4th July, 2012	Co-ordinator	NIT, Tiruchirappalli
One day Seminar on Support Vector Machine and its Applications under self- support	Local	8th June 2012	Co-ordinator	NIT, Tiruchirappalli
Two day Workshop on Technical paper preparation using Latex software under self -support	Local	19th and 20th June 2012	Co-ordinator	NIT, Tiruchirappalli
A five day Workshop on Wireless Sensor Networks and its Applications under TEQIP-II	National	12th- 16th May 2014	Co-ordinator	NIT, Tiruchirappalli
One day Workshop on Wireless Sensor Network- Hardware and Software under TEQIP-II	Local	12th August 2014	Co-ordinator	NIT, Tiruchirappalli

Performa for CV of Faculty/ Staff Members

Workshop on IoT using Aurdino	Local	13th &14th November 2015	Co-ordinator	NITT
ATAL Workshop on Cyber Security: Attacks and Tools	National	08-09-20 to 12-09-20	Co-ordinator	Online mode

18. Invited Talks delivered

Topic	Date	Inviting Organization
OSI Architecture – Networking	2005	Seethalakshmi Ramaswami College for Women, Tiruchirappalli
Networking protocols	2011	Kongunadu college, Namkkal
Practical demonstration of WSN and applications	2015	Kongu Engineering College, Salem
Research Issues and Challenges in Wireless Sensor Networks	2019	Seethalakshmi Ramaswami College for Women, Tiruchirappalli

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	I.S.T.E.	2001
Life member	C.S.I	2006
Member	Indian Institute of Engineers	2009

Tiruchirappalli: Performa for CV of Faculty/ Staff Members

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	23-04-2007 to 23-05-2007	Training at Communication & Internet Research Lab and Network lab
Malaysia	May 13-15, 2008	International Conference on Computer & Communication Engineering (ICCCE 08)

21. Publications

(A) <u>Referred Journals</u>

Author(s)	Title of Paper	Journal	Volume (No.)	Page Number	Year	Impact fcator
UM Durairaj, S Selvaraj	Two-level clustering and routing algorithms to prolong the lifetime of wind farm-based WSN	IEEE Sensors Journal	21 (1)	857-867	**2020**	
M Meenalochani, N Hemavathi, S Sudha	Performance analysis of iterative linear regression-based clustering in wireless sensor networks	IET Science, Measurement & Technology	14 (4)	423-429	**2020**	
M Manickam, S Selvaraj	Range-based localisation of a wireless sensor network using Jaya algorithm	IET Science, Measurement & Technology	13 (7)	937-943	**2019**	
DU Maheswari, S Sudha, M Meenalochani	Fuzzy based adaptive clustering to improve the lifetime of wireless sensor network	China Communications	16 (12)	56-71	**2019**	
D Uma Maheswari, S Sudha	Node degree based energy efficient two-level clustering for wireless sensor networks	Wireless Personal Communications	104 (3)	1209-1225	**2019**	

Tiruchirappalli: Performa for CV of Faculty/ Staff Members

M Meenalochani, S Sudha	Jammed node detection and routing in a multihop wireless sensor network using hybrid techniques	Wireless Personal Communications	104 (2)	663-675	**2019**	
N Hemavathi, M Meenalochani, S Sudha	Influence of received signal strength on prediction of cluster head and number of rounds	IEEE Transactions on Instrumentation and Measurement	69 (6)	3739-3749	**2019**	
R Kumaravel, S Selvaraj, C Mala	A multidomain layered approach in development of industrial ontology to support domain identification for unstructured text	IEEE Transactions on Industrial Informatics	14 (9)	4033-4044	**2018**	
CD Gracia, S Sudha	Adaptive clustering of embedded multiple web objects for efficient group prefetching	Arabian Journal for Science and Engineering	42 (2)	715-724	**2017**	
K Rajbabu, H Srinivas, S Sudha	Industrial information extraction through multi-phase classification using ontology for unstructured documents	Computers in Industry	100	137-147	**2018**	
H Natarajan, SK Nagpal, S Selvaraj	Impact of rate of recurrent communication of sensor node on network lifetime in a wireless sensor network	IET Science, Measurement & Technology	11 (4)	473-479	**2017**	
Chithra D Gracia, S.Sudha	ART2 Clustering of Multiple web objects for qualitative web Prefetching	Journal of Applied Artificial Intelligence, Taylor and Francis	Vol.30, Issue 5	pp.475493,	2016	0.606
Chithra D Gracia, S.Sudha	Adaptive clustering of embedded multiple web objects for efficient group prefetching	Journal for Science and Engineering, Springer		pp 1-10	2016	0.728

Tiruchirappalli: Performa for CV of Faculty/
Staff Members

Hemavathi.N, Sudha S	A Novel Regression based Clustering Technique for Wireless Sensor Networks	Journal of Wireless Personal Communications, Springer.	88 (4)	985-1013	2016	0.701
K.Rajbabu, S.Sudha	A novel rule-centric object oriented approach for document generation	Journal of Computers in Industry, Elsevier.	Vol.65, Issue 2	pp.235246	2014	1.685
S.Sudha, N.Ammasaigounden	An aggregate marker for bandwidth fairness in DiffServ.	Journal of Network and Computer Applications, Elsevier.	Vol.35, Issue 6	pp.1973 - 1978	2012	2.331
S.Sudha, N.Ammasaigounden	A new TSW Based Marker for Bandwidth Fairness between Aggregates in Diffserv.	International Journal of Computer Sciences and Engineering Systems.	Vol No 4 Issue 3.	pp.235241	2010	
S.Sudha, N.Ammasaigounden	A new Token Allocation Algorithm for TCP Traffic in Diffserv Network	International Journal of the Computer, the Internet and Management.	Vol.16, Issue 3.	pp.41-47	2008	

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page Nos	Conference Theme	Venue	Year
Shameem Ansar A, S. Sudha	Prediction of Earthquake Induced Landslide Using Deep Learning Models	5th International Conference on Computing, Communication and Security	pp.1-6	Artificial Intelligence	Patna, India	2020
A Sathish Kumar, S Sudha	Hardware realization of fuzzy logic driven PWM controller for a cold storage system	2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT)	236-240	Coomunication Technologies	Bangalore, India	2017

Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Sathish Kumar.A, S.Sudha	Design of Wireless Sensor Network based fuzzy logic controller for a Cold Storage System.	Proceeding of 7th Power India International Conference (PIICON)	pp.1-6	Computer Networks	Bikaner, Rajasthan.	2016
D.Uma Maheswari, S.Sudha	Influence of Cluster Head Position in the Lifetime of Wireless Sensor Network.	Proceedings of third IEEE Conference on Next Generation Computing Technologies	pp. 378-381	Wireless Networks	Dehradun India	2016
CD Gracia, S Sudha	A case study on memory efficient prediction models for web prefetching	International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS)	pp. 1-6,	Technology and Science	Pudukottai, TamilNadu	2016
Meenalochani Manickam, S.Sudha,	Fuzzy based Estimation of Received Signal Strength in a Wireless Sensor Network	Proceedings of the Third International Symposium on Women in Computing and Informatics	pp.62 4-628	Soft Computing	Kerala	2015
Chithra D Gracia, S.Sudha	Ensemble Prefetching Through Classification Using Support Vector Machine	Proceedings of the International Conference on Intelligent Systems Technologies and Applications.	pp.26 1-273	Web Services	Tanjore	2015
Shobhit Kumar Nagpal, S. Sudha	Two-Level Fuzzy based Fire Prediction Scheme using Wireless Sensor Network	Proceedings of IEEE International Conference on Advances in Computing and Communication	pp.5762	Computer Networks	Tanjore	2015

Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Shobhit Kumar Nagpal, S. Sudha.	Design and Development of a Sensor Node to Monitor and Detect Change in Internal Parameters of a Cold Storage System	Proceedings of Global Conference on Communication Technologies (GCCT)	pp.74 5-748	Wireless Networks	Nagerkoil	2015
M Meenalochani, S Sudha	Fuzzy based estimation of received signal strength in a wireless sensor network	Proceedings of the Third International Symposium on Women in Computing and Informatics	624-628	Computing	Delhi	2015
Hemavathi.N, Sudha S.	Hardware Realization of Fuzzy based Cluster Head Selection in Wireless Sensor Networks	International Conference on Electronic Design, Computer Networks & Automated Verification		Wireless Sensor Networks	Megalaya.	2015
G Kumar, H Mehra, AR Seth, P Radhakrishnan, N Hemavathi, S Sudha	An hybrid clustering algorithm for optimal clusters in wireless sensor networks	2014 IEEE Students' Conference on Electrical, Electronics and Computer				2014
K Rajbabu, S Sudha	DAG Based Feature Additive XML Schema Generation for Unstructured Text	2013 International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery	pp.117-124	Knowledge Discovery	China	2013
CD Gracia, S Sudha	MEPPM-memory efficient prediction by partial match model for web prefetching	3rd IEEE International Advance Computing Conference (IACC)	736-740	Modeling	Ghaziabad, India	2013

Tiruchirappalli: Performa for CV of Faculty/ Staff Members

A Nagendran, V Kartick, VS Ram, L SenthilKumar, S Sudha	Study on the effect of CBR on packet marking in assured forwarding	IEEE Students' Conference on Electrical, Electronics and Computer (SCOReD)	59-62	Electrical Engineering	Malaysia	2010
S Sudha, BS Rao, N Ammasaigounden	A modified I2TSWTCM to improve bandwidth fairness in Diffserv	IEEE Region 10 and the Third international Conference on Industrial and Information Systems	pp.1-4	Networking	Kharagpur, India	2008
S Sudha, N Ammasaigounden	A modified approach for fair bandwidth allocation between TCP and UDP traffic in DiffServ network	International Conference on Computer and Communication Engineering	788-791	International Conference	Kuala Lumpur, Malaysia	2008
S Sudha, S Maddipati, N Ammasaigounden	A new adaptive marker for bandwidth fairness between TCP and UDP traffic in DiffServ	TENCON 2008 - 2008 IEEE Region 10 Conference	pp.1-5	Networking	Hyderabad, India	2008

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
NIL				