

# National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

## Curriculum Vitae



G.R. Gangadharan is working as an Associate Professor in the National Institute of Technology (NIT), Tiruchirappalli. His research interests are mainly located on the interface between technological and business perspectives. He has received Ph.D. degree in Information and Communication Technology from the University of Trento, Trento, Italy and European University Association. He is a Senior Member of IEEE and ACM.

1. Name **Dr. G. R. GANGADHARAN**
2. Designation: ASSOCIATE PROFESSOR
3. Office Address: Department of Computer Applications, NIT, Tiruchirappalli
4. Telephone (Direct) (Optional):  
Telephone : 0431-2503737  
Mobile (Optional):
5. Email (Primary): [ganga@nitt.edu](mailto:ganga@nitt.edu) Email (Secondary) : [geeyaar@gmail.com](mailto:geeyaar@gmail.com)
6. Field(s) of Specialization: Internet Technologies (Cloud / Edge Computing), Energy Informatics, Big Data Analytics

### 7. Employment Profile

Job Title	Employer	From	To
Associate Professor	Institute for Development and Research in Banking Technology (IDRBT), Hyderabad	Feb. 2016	May 2018
Assistant Professor	Institute for Development and Research in Banking Technology (IDRBT), Hyderabad	Sept. 2011	Jan. 2016
Researcher	IBM Research, India	Nov. 2010	Aug. 2011
Postdoc Researcher	Politecnico di Milano, Milan, Italy	Mar. 2010	Aug. 2010
Researcher	Novay (Telematica Institute), Enschede, Netherlands	Jun 2008	Feb. 2010
Postdoc Researcher	University of Trento, Trento, Italy	Nov. 2007	May 2008

## National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

---

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	University of Trento, Italy	2008		Info. & Communication Technology
M.S.	Scoula Superiore Sant'Anna, Pisa, Italy	2004	First	Information Technology
M.Sc.	M.S. University, Tirunelveli, India	1999	First	Computer Science
B.Sc.	M.S. University, Tirunelveli, India	1997	First	Computer Science
HSC	Board of Hr. Sec. Examinations, Tamilnadu	1994	First	Mathematics, Physics, Chemistry and Biology
SSLC	Board of Sec. Education, Tamilnadu	1992	First	Mathematics, Science, and Social Science

### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/ Centre/Institution	From	To
Placement Coordinator	IDRBT	April 2016	May 2018
R&D Coordinator	IDRBT	Jan. 2014	May 2018
PGDBT Academics Coordinator	IDRBT	April 2017	May 2018
M.Tech. Coordinator	IDRBT	Aug. 2014	April 2017
Coordinator – International Initiatives	IDRBT	Dec. 2014	May 2018

### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

### 12. Fellowships

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

## National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

---

### 13. Details of Academic Work

(i) Curriculum Development

- Masters level courses on Internet Technologies, E-Commerce and Payment Systems, Data Engineering

(ii) Courses taught at Postgraduate levels

- E-Commerce and Payment Systems
- Database Management Systems
- Software Engineering
- Information Systems

(iii) Projects guided at Postgraduate level: 16 M.Tech. Projects Guided

(iv) Other contribution(s)

### 14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Next Generation Smart Data Centers	Netherlands Organisation for Scientific Research (NWO), Government of Netherlands	Oct. 2015	Sept. 2019	Ongoing
Data Security in Cloud Services	IBM International Shared University Research (SUR), United States of America	Apr. 2014	Mar. 2015	Completed
Security Architecture for Banking Cloud Services	IBM India University Relations	Dec. 2012	Nov. 2013	Completed

### 15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
Gopal Narayan Rai	Modeling and Verification of Web Services using Recursive Composition Algebra	Supervisor	2017
Deepnarayan Tiwari	Authenticated Secure Data Sharing and Storage in Cloud Computing	Supervisor	2018
Chandrashekar Jatoth	QoS aware Service Composition using Computational Intelligence Methods	Supervisor	2018
Dinesh Reddy Vemula	Energy Efficient Data Center Management Strategies	Supervisor	Thesis Submitted on May 2018

## National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

---

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
Aug. 28-31 & Sept. 26-28, 2014	Master Teacher Programme	International	Participant	Indian School of Business, Hyderabad	ISB, Hyderabad
Dec. 03-08, 2012	E-Learning	National	Participant	UGC Academic Staff College	JNTU, Hyderabad

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

Title of Activity	Level of Event (International / National / Local)	Date (s)	Role	Venue
2 <sup>nd</sup> IDRBT Doctoral Colloquium	National	Dec. 20-21, 2012	Organizing Coordinator	Hyderabad, India
3 <sup>rd</sup> IDRBT Doctoral Colloquium	National	Dec. 16-17, 2013	Organizing Coordinator	Hyderabad, India
4 <sup>th</sup> IDRBT Doctoral Colloquium	National	Dec. 11-12, 2014	Organizing Coordinator	Hyderabad, India
International Conference on Distributed Computing and Networking (ICDCN 2017)	International	Jan. 04-07, 2017	Organizing Chair	Hyderabad, India
Symposium on IT in Practice (ITiP) (COMPSAC 2018)	International	July 23- 27, 2018	Program Chair	Tokyo, Japan

18. Invited Talks delivered

Topic	Date	Inviting Organization
Licensing Services: Formal Analysis and Implementation	Nov. 24, 2006	FBK Trento, Italy
The Science of Free/Open Services	Apr. 05, 2007	Carleton Univ., Ottawa, Canada
A Formal Approach Service Licensing	July 2007	Technical Univ. of Vienna, Austria
Service Licensing	Oct. 16 2007	Univ of Milano, Italy
Service Licensing	Nov. 2007	Univ of Essen, Germany
Rights and Obligations Aware Services	April 21, 2009	Univ of Aarhus, Denmark

**National Institute of Technology, Tiruchirappalli:**  
**Performa for CV of Faculty/ Staff Members**

Service Level Agreements in Cloud Computing	Nov. 25, 2009	Univ of Lugano, Switzerland
Cloud Computing	25 Feb 2013	Dr. GRD College of Science, Coimbatore
Cloud Computing	26 June 2013	MRCET, Hyderabad

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Senior Member	ACM	90530299
Senior Member	IEEE	8065758

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Italy	2003- 2008	For studying M.S. and Ph.D.
Canada	2007 (Feb. -Apr.)	Visiting Researcher
Austria	2007 (May -July)	Visiting Researcher
Germany, Ireland, Denmark, Czech, USA, Switzerland	2005-2010	For several research papers presentations

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Chandrashekar Jatoth, G.R. Gangadharan, Ugo Fiore, Rajkumar Buyya	SELCLOUD: A Hybrid Multi-Criteria Decision Making Model for Selection of Cloud Services	Soft Computing (Springer)			In Press	
Gopal Rai, G R Gangadharan	Verifying Compositional Equivalence Between Web Service Composition	Concurrency and Computation: Practice and Experience (Wiley)			In Press	

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

	Graphs					
Vemula Dinesh, G R Gangadharan, Subrahmanya Rao	Energy-aware Virtual Machine Allocation and Selection in Cloud Data Centers	Soft Computing (Springer)			In Press	
Vemula Dinesh, Brian Setz, Subrahmanya Rao, G R Gangadharan, Marco Aiello	Best Practices for Sustainable Data Centers	IEEE IT Professional			In Press	
Chandrashekar Jatho, G.R. Gangadharan, Ugo Fiore, Rajkumar Buyya	QoS-aware Big Service composition using MapReduce based Evolutionary Algorithm with Guided Mutation	Future Generation Computer Systems (Elsevier)	86	1008- 1018	2018	
Deepnarayan Tiwari, G. R. Gangadharan	SecCloudSharing: Secure data sharing in public cloud using ciphertext policy attribute based proxy re- encryption with revocation	Int. Journal of Communication Systems (Wiley)	31 (5)		2018	
Vemula Dinesh, Brian Setz, Subrahmanya Rao, G R Gangadharan, Marco Aiello	Metrics for Sustainable Data Centers	IEEE Transactions on Sustainable Computing	2 (3)	290-303	2017	
G.R. Gangadharan	Open Source Solutions for Cloud Computing	IEEE Computer	50 (1)	66-70	2017	
Chandrashekar Jatho, G.R. Gangadharan, Rajkumar Buyya	Computational Intelligence based QoS-aware Web Service Composition: A Systematic Literature Review	IEEE Transactions on Services Computing	10 (3)	475-492	2017	
Chandrashekar Jatho, G.R. Gangadharan,	Evaluating the efficiency of cloud services	Soft Computing (Springer)	21 (23)	7221- 7234	2017	

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

Ugo Fiore	using modified data envelopment analysis and modified super-efficiency data envelopment analysis					
M. Verma, G.R. Gangadharan, N.C. Narendra, R.Vadlamani, L.Ramachandran, V. Inamdhar, R. N. Calheiros, Rajkumar Buyya	Dynamic Resource Demand Prediction and Allocation in Multi-tenant Service Clouds	Concurrency and Computation: Practice and Experience (Wiley)	28 (17)	4429-4442	2016	
Deepnarayan Tiwari, G.R. Gangadharan, Maode Ma	Secure Delegation of Services through Proxy Signature with Revocation	International Journal of Trust Management in Computing and Communications (Inderscience)	3 (4)	291-318	2016	
G.R. Gangadharan, Lorna Uden, Paul Oude Luttighuis	Sourcing Requirements and Designs for Software as a Service	International Journal of Systems and Service Oriented Engineering (IGI Global)	6 (1)	1- 16	2016	
Shitalkumar Halale, G.R. Gangadharan, Lorna Uden	Enhancing Co-creation Process Using Social Media	IEEE IT Professional	17 (2)	40-45	2015	
L. Sangavarapu, S. Mishra, A. Williams, G.R. Gangadharan	Indian Banking Community Cloud	IEEE IT Professional	16 (6)	25-32	2014	
G.R. Gangadharan, Stefano De Paoli, Vincenzo D'Andrea, Michael Weiss	Managing License Compliance in Free and Open Source Software Development	Information Systems Frontiers (Springer)	14 (2)	143-154	2012	
Hong-Linh Truong, Marco Comerio, Flavio De Paoli, G.R. Gangadharan,	Data Contracts for Cloud-based Data Marketplaces	International Journal of Computational Science and Engineering,	7 (4)	280-295	2012	

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

Schahram Dustdar		(Inderscience)				
G.R. Gangadharan, Vincenzo D'Andrea	Service Licensing: Conceptualization, Formalization, and Expression	Journal of Service Oriented Computing and Applications (Springer)	5 (1)	37-59	2011	
Stefano De Paoli, G.R. Gangadharan, Aphra Kerr, Vincenzo D'Andrea	Toward Trust as Result: A Transdisciplinary Research Agenda for the "Future Internet"	Journal tripleC - Cognition, Communication, Co-operation	9 (2)	702-714	2011	
G.R. Gangadharan, Vincenzo D'Andrea	Managing Copyrights and Moral Rights of Service-Based Software	IEEE Software	28 (2)	48-55	2011	
G.R. Gangadharan	From Legal Code to Digital Code: Making Software Services Rights-aware	International Journal of Private Law (Inderscience)	4 (2)	299-314	2011	
G.R. Gangadharan, Vincenzo D'Andrea, Michael Weiss	Free/Open Services (F/O-Services)	IEEE IT Professional	12 (6)	24-30	2010	
G.R. Gangadharan, Paul Oude Luttighuis	BHive: A Reference Framework for Business-driven Service Design and Management	Journal of Service Science Research (Springer)	2 (1)	81-110	2010	
G.R. Gangadharan, Erwin Fiel	Analyzing Requirements and Approaches for Sourcing Software Based Services	International Journal of Applied Logistics (IGI)	1 (2)	1-16	2010	
Michael Weiss, G.R. Gangadharan	Modeling the Mashup Ecosystem: Structure and Growth	Journal of the R & D Management (Wiley)	40 (1)	40-49	2010	
G.R. Gangadharan, Vincenzo	Service Orientation: Licensing	Journal of International Commercial	4 (1)	1-11	2010	



**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

D'Andrea	Perspectives	Law and Technology				
G.R. Gangadharan, M. Weiss, V. D'Andrea, R. Iannella	Service Licensing Composition and Compatibility Analysis	International Journal of Cooperative Information Systems (World Scientific)	17 (3)	301-317	2008	
A. Ivanyukovich, G.R. Gangadharan, V. D'Andrea, M. Marchese	Towards A Service-Oriented Development Methodology	Journal of Integrated Design & Process Science, (IOS Press)	9 (3)	53-62	2005	

**(B) Conferences/Workshops/Symposia Proceedings (Since 2015)**

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
C.Verma, Dinesh Vemula, Gangadharan G.R. and Atul Negi	Energy Efficient VM Placement in Cloud Data Centers Using Modified IWD Algorithm	International Conference on Signal Image Technology and Internet-Based Systems (SITIS 2017)	13-20	Signal Image Technology / Internet Based Systems	Jaipur, India	2017
Lalit Sangavarapu, Gangadharan G.R., and Raghu Reddy	COMPAC - A Pricing Model for COMMUNITY Cloud	IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI-2017)	2033-2039	Computing and Informatics	Manipal, India	2017
Vemula Dinesh and Gangadharan G.R.	Towards an "Internet of Things" Framework for Financial Services Sector	IEEE International Conference on Recent Advances in Information Technology (RAIT'16)	177-181	Advances in Information Technology	Dhanbad, India	2016
Deepnarayan	Secure Sharing	International	24-35	Security in	Kochi,	2015

**National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members**

Tiwari and Gangadharan G.R.	of Data in Cloud Computing	Symposium on Security in Computing and Communications (SSCC'15)		Computing	India	
Deepnarayan Tiwari and Gangadharan G.R.	A Novel Secure Cloud Storage Architecture Combining Proof of Retrievability and Revocation	International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015)	438-445	Computing and Informatics	Kochi, India	2015
Deepnarayan Tiwari and Gangadharan G.R. and Maode Ma	Provable secure protected designated proxy signature with revocation	International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015)	2033-2041	Computing and Informatics	Kochi, India	2015
Gopal N. Rai and Gangadharan G.R.	Set Partition and Trace based Verification of Web Service Composition	International Conference on Ambient Systems, Networks and Technologies	278-285	Systems, Networks and Technologies	London, UK	2015
Gopal N. Rai, Gangadharan G.R. and Vineet Padmanabhan	Algebraic Modeling and Verification of Web Service Composition	International Conference on Ambient Systems, Networks and Technologies	675-679	Systems, Networks and Technologies	London, UK	2015
Chandrashekar Jatoth and Gangadharan G.R.	Fitness Metrics for QoS-aware Web Service Composition using Metaheuristics	International Conference on Intelligent Decision Technologies	267-277	Intelligent Decision Technologies	Sorrento, Italy	2015
Chandrashekar Jatoth and Gangadharan G.R.	QoS-aware Web Service Composition Using Quantum Inspired Particle Swarm Optimization	International Conference on Intelligent Decision Technologies	255-265	Intelligent Decision Technologies	Sorrento, Italy	2015
Gopal N. Rai and Gangadharan	Architectural Characterization of Web Service	International Conference on Advanced	447-456	Computing, Networking, and	Bhubaneswar	2015

National Institute of Technology, Tiruchirappalli:  
Performa for CV of Faculty/ Staff Members

---

G.R.	Interaction Verification  <b>BEST PAPER AWARD</b>	Computing, Networking, and Informatics		Informatics		
------	--	--	--	-------------	--	--

(C) Books & Monographs

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