### **Curriculum Vitae**

## **Brief Profile:**

Dr. S. Usha Kiruthika joined NIT Trichy as an Assistant Professor in the Department of Computer Science and Engineering in October 2022. She completed her B.Tech in Information Technology and M.E in Computer Science and Engineering from Anna University. She completed her Ph.D from MIT campus, Anna University in the area of automated negotiation. She had over 7 years of experience in academics in various reputed institutes. Her current areas of research interest are multi-agent systems and reinforcement learning. She collaborated on a research project with the University of Malaya, Malaysia. She has several publications in international journals and conferences to her credit.



- 1. Name: Dr. S. Usha Kiruthika
- 2. **Designation:** Assistant Professor
- 3. Office Address: Dept. of CSE, NIT Trichy
- 4. Telephone (Direct) (Optional):

Telephone : Extn:

**Mobile (Optional):** 9444446959

- 5. Email (Primary): usha@nitt.edu Email (Secondary): usha.kiruthika@gmail.com
- 6. Field(s) of Specialization: Multi-agent systems, Artificial Intelligence, Cloud Computing

Job Title	Employer	From	То
Assistant Professor	NIT, Trichy	Oct 2022	Present
Assistant Professor	Shiv Nadar University, Chennai	Jun 2021	Oct 2022
Assistant Professor	SRM Institute of Science and Technology, Kattankulathur	May 2018	May 2021
Temporary Faculty	NIT, Trichy	Jun 2017	Apr 2018
Assistant Professor	SRM Institute of Science and Technology, Ramapuram	Jul 2016	May 2017
Teaching Fellow	Madras Institute of Technology, Anna University	Jul 2010	Dec 2011

### 7. Employment Profile

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	Anna University	2017		Automated Negotiation, Cloud Computing
M.E	Anna University	2010	First Class with Distinction	Computer Science and Engineering
B.Tech	Anna University	2008	First Class with Distinction	Information Technology
XII Std	Tamil Nadu State Board	2004	First Class	Maths, Biology
X Std	Matriculation	2002	First Class	Maths, Science, Social

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

P	osition	Faculty/Department/Centre/Institution	From	То
NBA	Committee	Department of CSE	10.11.22	Present
membe	er			

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

Position	Institution	From	То
DC Member	AVIT, Chennai	Nov, 2019	Present

#### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2010	Gold Medal	SSN College of Engineering

#### 12. Fellowships

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

### **13. Details of Academic Work**

- (i) Curriculum Development: B.Tech AI&DS, B.Tech IoT, SNU Chennai.
- (ii) Courses taught at Postgraduate and Undergraduate levels:

Programming in C Data Structures Database Management Systems Theory of Computation Compiler Design Digital System Design Operating Systems (iii)Projects guided at Postgraduate level: NIL

(iv)Other contribution(s): NIL

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

Title of Droiget	Eunding Aganay	Dura	ation	Status
Title of Project	Funding Agency	From	То	Ongoing/ Completed
Physical Mobility	University of	July 2020	June 2022	Completed
App for the	Malaya			
Disabled				

#### **15. Number of PhDs guided:**

Name of the PhD	Title of PhD	Role(Supervisor/ Co-	Year of
Scholar	Thesis	Supervisor)	Award

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

Date (s)	Title of Activity	Level of	Role	Event	Venue
		Event	(Participant/	Organized	
		(International/	Speaker/	by	
		National/	Chairperson,		
		Local)	Paper		
			presenter,		
			Any other)		
30/03/22	International	International	Session	Easwari	Online
and	Virtual		Chair	Engineering	
31/03/22	Conference on			College	
	Machine				
	Learning				
	Applications in				
	Applied Sciences				
	and Mathematics				

10/10/2020		T 1	D	a · a ·	
10/12/2020	Virtual IEEE	International	Paper	Sri Sairam	Online
and	International		Presenter	Engineering	
11/12/2020	Conference on			College	
	Power, Energy,				
	Control and				
	Transmission				
	Systems				
	(ICPECTS 2020)				2.11
25/05/20	AICTE ATAL	National	Participant	Indian	Online
to	FDP on Data			Institute of	
29/05/20	Sciences			Information	
				Technology,	
				Vadodara	
15/04/20	AICTE FDP on	National	Participant	National	Online
to	Internet of			Institute of	
19/04/20	Things			Technical	
				Teachers	
				Training &	
				Research	
				(NITTTR),	
				Chandigarh	
11/11/19	AICTE ATAL	National	Participant	Madras	Madras
to	FDP			Institute of	Institute of
15/11/19				Technology	Technology
23/10/18	FDP on	National	Participant	SRMIST	SRMIST
to	Cognitive				
27/10/18	Computing				
29/01/13	How to Write for	National	Participant	Springer-	Anna
	and get Published			Edanz	University
	in Scientific				
	Journals and				
	Publish				
	Manuscript				

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

Title of Activity	Level of Event (International/	Date (s)	Role	Venue
	National/ Local)			

# 18. Invited Talks delivered

Торіс	Date	Inviting Organization
Multi Agent Systems	26.08.2021	Easwari Engineering College
Cloud Applications	05.04.2021	Easwari Engineering College

### **19. Membership of Learned Societies**

Type of Membership	Organization	Membership No. with
(Ordinary Member/ Honorary		date
Member / Life Member )		
Life Member	International Association of	M 80345182
	Computer Science and	
	Information Technology	
	(IACSIT)	
Life Member	International Association of	M 124166
	Engineers (IAENG)	

# 20. Academic Foreign Visits

Country	Duration of Visit	Programme

#### **21.** Publications

### (A) <u>Refereed Research Journals</u>:

Author(s)	Title of Paper	Journal	Volu me (No.)	Page num bers	Year	Impact Factor of the Journal (Option al)
Thiam Kian Chiew, Selina Khoo, Payam Ansari, Usha Kiruthika	Mobile and wearable technologies for persons with disabilities: a bibliometric analysis (2000–2021)	Disability and Rehabilitation: Assistive Technology		1-9	2022	1.834
Usha Kiruthika, Thamarai Selvi Somasundaram, S. Kanaga Suba Raja	Lifecycle Model of a Negotiation Agent: A Survey of Automated Negotiation Techniques	Group Decision and Negotiation	29	1239 - 1262	2020	2.928

		1	1		1	
Usha Kiruthika, Thamarai Selvi Somasundaram	Efficient agent-based negotiation by predicting opponent preferences using AHP	Journal of Applied Research and Technology	16	22- 34	2018	
Usha Kiruthika, S. Kanaga Suba Raja, R. Jaichandran	IOT based automation of fish farming	Journal of Advanced Research in Dynamical and Control Systems	9	50- 57	2017	
Usha Kiruthika, Thamarai Selvi Somasundaram	Efficient negotiation of SLA parameters in cloud computing environment	Asian Journal of Information Technology	15	3587 - 3597	2016	
S. Kanaga Suba Raja, Usha Kiruthika	An energy efficient method for secure and reliable data transmission in wireless body area networks using RelAODV	Wireless Personal Communicatio ns	83	2975 - 2997	2015	2.017
Thamarai Selvi Somasundaram, Kannan Govindarajan, Usha Kiruthika, Rajkumar Buyya	Semantic-enabled CARE Resource Broker (SeCRB) for managing grid and cloud environment	The Journal of Supercomputin g	68	509- 556	2014	2.557

# (B) <u>Conferences/Workshops/Symposia</u> Proceedings

Author(s)	Title of Abstract/	Title of the	Page	Conference	Venue	Year
	Paper	Proceedings	numbers	Theme		
Utkarsh	Lucid-GAN: An	IEEE	1-6	Computatio	Hong	2021
Maheshwari,	adversarial	Internationa		nal	Kong	
Venkata Pavan	network for	1		Intelligence		
Kumar	enhanced image	Conference				
Turlapati, Ush	inpainting	on				
a Kiruthika		Computatio				
		nal				
		Intelligence				
		and Virtual				
		Environmen				

Usha Kiruthika, S. Kanaga Suba Raja, C. J. Raman, V. Balaji	A Novel Fraud Detection Scheme for Credit Card Usage Employing Random Forest Algorithm Combined with Feedback Mechanism	ts for Measureme nt Systems and Application s International Conference on Power, Energy, Control and Transmissio n Systems (ICPECTS)	1-6	Power, Energy, Control and Transmissio n Systems	Sri Sairam Enginee ring College, Chennai	2020
Usha Kiruthika, S. Kanaga Suba Raja, V. Balaji, C. J. Raman.	E-Agriculture for Direct Marketing of Food Crops Using Chatbots	International Conference on Power, Energy, Control and Transmissio n Systems (ICPECTS)	1-7	Power, Energy, Control and Transmissio n Systems	Sri Sairam Enginee ring College, Chennai	2020
Venkata Naga Rani Bandaru, S. Usha Kiruthika, G. Rajasekaran, M. Lakshmanan	Device aware VOD Services with Bicubic Interpolation Algorithm on Cloud	4th Conference on Information and Communica tion Technology	1-5	Information and Communic ation Technology	IIITDM Kanche epuram, Chennai	2020
Thamarai Selvi Somasundaram, Usha Kiruthika, Gowsalya, M., Hemalatha, A., Philips, A.	Determination of competency of programmers by classification and ranking using AHP	IEEE International Conference on Electro Information Technology	194-200	Electro Information Technology	DeKalb, Illinois	2015
Kanchana Rajaram, Usha Kiruthika	Dynamic Contract Generation and Monitoring for B2B Applications with Composite Services	Communicat ions in Computer and Information Science	362-364	Computer and Information Science	Kochi, Kerala	2010

# (C) Books & Monographs

Author(s)	Title of	Name of	Year of	ISSN/ISBN
	Book/Monograph	Publishers	Publication	Number
C.J. Raman, S.	Blockchain Technology	CRC Press	2022	9780367654481
Usha	for Privacy and Security			
Kiruthika, L.	Issues and Challenges in			
Javid Ali, S.	IoT based Systems			
Kanaga Suba				
Raja				
Kanaga Suba	Secure and Reliable	Lambert	2020	978-
Raja S, Usha	Data Transmission in	Academic		6200549037
Kiruthika S	Wireless Body Area	Publishing		
	Networks: An Approach			
	using RelAODV			