

National Institute of Technology, Tiruchirappalli:

Performa for CV of Faculty/ Staff Members

Curriculum Vitae

Dr. K. Sitara received the B. Tech Degree in Computer Science and Engineering from College of Engineering, Thiruvananthapuram, Kerala. She completed her M. Tech. Computer Science with specialization in Digital Image Computing from University of Kerala. She received her Ph.D. Degree from University of Hyderabad for the research work carried out at Centre of Excellence in Cyber Security in Institute for Development and Research in Banking Technology (IDRBT), Hyderabad, a research institute established by RBI. Her area of research includes Cyber Forensics and Video Surveillance. She is a reviewer for several International journals and conferences.



1. Name: SITARA K
2. Designation: ASSISTANT PROFESSOR
3. Office Address: Department of CSE, NIT, Tiruchirappalli
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Mobile (Optional):
5. Email (Primary): sitara@nitt.edu Email (Secondary): sitara.kk@gmail.com
6. Field(s) of Specialization: Cyber Forensics, Video Surveillance, Multimedia Forensics

7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	National Institute of Technology, Tiruchirappalli	18-06-2020	Till date
Assistant Professor	National Institute of Technology, Hamirpur	25-09-2019	27-04-2020
Assistant Professor	Madanapalle Institute of Technology & Science, AP	23-07-2018	24-09-2019
Research Fellow	IDRBT, Hyderabad	04-08-2014	28-06-2018
Assistant Professor	MES College of Engineering, Kuttippuram, Kerala	01-08-2011	01-08-2014

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	University of Hyderabad	2019	-	Computer Science – Cyber Forensics
M.Tech	University of Kerala	2011	I class	Computer Science with Digital Image Computing
B.Tech	University of Kerala	2009	I class	Computer Science and Engineering

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HSC	Board of Higher Secondary Examination, Kerala	2005	I class with Distinction	Mathematics and Science
SSLC	Board of Public Examination, Kerala	2003	I class	Mathematics, Science, History & Geography

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Faculty Advisor	Dramatics Club	July 2021	Till Date
Faculty Member	Anti-Ragging Committee	Feb 2021	Till Date
Time Table In-charge	Department of CSE	July 2020	Till Date
NBA Work	Department of CSE	July 2021	Till Date
Faculty Member	M.Tech Project Committee	July 2020	May 2021

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
DC Member	SRM IST, Chennai	Dec 2020	Till Date

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)

13. Details of Academic Work

(i) Curriculum Development – NIL

(ii) Courses taught at Postgraduate and Undergraduate levels:

UG:

Introduction to Programming, Data Structures, Principles of Compiler Design, Combinatorics and Graph Theory, Artificial Intelligence, AI: Knowledge Representation and Reasoning, Data Mining, Mobile Computing

PG:

Data Compression

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(iii) Projects guided at Postgraduate level:

Sl No.	Project Title	Student Name	AY Year
1	Face Anti-Spoofing using Multi-channel Central difference convolutional networks (CDCNs)	Vinay Kumar Pasi	2020- 2021
2	Weapon Detection and Classification from Surveillance Videos using Deep Learning	Anjali Goenka	2021-2022
3	Human Fall Detection in surveillance videos	Simran Jain	2021-2022

(iv) Other contribution(s)

- Handling MIS at Department level
- Exam Scheduling at Department level
- Handled class for PhD student
- Member of Stock verification – Dept of CSE (2020-2021, 2021-2022)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed

15. Number of PhDs guided

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

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
Mar 23- Mar 25, 2021	Workshop on Capacity Building of Women Faculty in Higher Education	Local	Participant	NIT Tiruchirappalli	NIT Tiruchirappalli
Aug 10- Aug 14, 2020	E-Content Development	National	Participant	National Institute of Technical Teachers Training & Research	Online
March 2, 2019	National Cyber Defence Conference 19	National	Participant	National Cyber Safety and Security Standards	Cochin
March 1, 2019	FDP on Cyber Security	National	Participant	National Cyber Safety and Security Standards	Cochin

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17-18 June 2019	MATLAB, Simulink & Related Tool Boxes	Local	Participant	Capricot Technologies Pvt. Ltd.	Hyderabad
23-28 Jan 2017	First IAPR Summer School on Document Analysis: Document Informatics	International	Participant	International Association of Pattern Recognition	Jaipur
March 15, 2014	One day training Programme on Quality Teaching for Quality Learning	Local	Participant	MES College of Engineering	Kuttipuram
20 May- June 1, 2013	FDP on Entrepreneurship	National	Participant	National Science & Technology Entrepreneurship Development Board (NSTEDB) in association with ISTE	Kottayam
Nov 19, 2011	One day workshop on Research Methodology	National	Participant	IEEE Malabar Section & MES College of Engineering	Kuttipuram

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

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
One Week Online Workshop on Recent Trends in Cyber Security and Forensics	National	26 th – 30 th April, 2021	Coordinator	Department of Computer Science and Engineering National Institute of Technology Tiruchirappalli

18. Invited Talks delivered

Topic	Date	Inviting Organization
Digital Forensics - An overview	Feb 27, 2022	Govt. Victoria College, Palakkad
ICG for Expressions, ICG for Control Flow Statements, Run Time Environment for Compilers	Jan 19 – 25, 2022	Anna University, Chennai
Introduction to Incident - Incident Response Methodology, Evidence Handling and its challenges, Smartphone forensics, File system Forensics, Video Forensics	Sept 2- Sept 6, 2020	Arya College of Engineering & Information Technology, Jaipur
Ad hoc Networks, UAV Systems	Aug 27- Aug 31, 2020	Global Institute of Technology Jaipur
Machine Learning for Cyber Forensics	July 6-July 10, 2020	Govt. College of Technology, Coimbatore
Image and Video Tampering Detection	Sept 5- Sept 15, 2018	IDRBT, Hyderabad

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19. Membership of Learned Societies

Type of Membership (Ordinary Member/Honorary Member / Life Member)	Organization	Membership No. with date
Member	ACM	9843612
Member	IEEE	93598723

20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
K Sitara, B. M. Mehtre	Differentiating synthetic and optical zooming for passive video forgery detection An anti-forensic perspective	Digital Investigation	30	1-11	2019	2.192
K Sitara, B. M. Mehtre	Automated Camera Sabotage Detection for Enhancing Video Surveillance Systems	Multimedia Tools and Applications	78	5819-5841	2019	2.757
K Sitara, B. M. Mehtre	Detection of inter-frame forgeries in digital videos	Forensic Science International	289	186-206	2018	2.395
K Sitara, B. M. Mehtre	Digital video tampering detection An overview of passive techniques	Digital Investigation	18	8-22	2016	2.192

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Anjali Goenka, K Sitara	Weapon Detection from Surveillance Images using Deep Learning	3rd International Conference of Emerging Technology (INCET 2022)	1-6	Emerging Technology	Jain College of Engineering Belagavi, India	2022
Simran Jain, K Sitara	Human Fall Detection in Surveillance Videos	3rd International Conference of Emerging Technology (INCET 2022)	1-6	Emerging Technology	Jain College of Engineering Belagavi, India	2022

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K Sitara, B. M. Mehetre	A Comprehensive Approach for Exposing Inter- Frame Video Forgeries	IEEE 13th International Colloquium on Signal Processing & Its Applications (CSPA 2017)	73-78	Signal Processing and its Applications	Penang, Malaysia	2017
K Sitara, B. M. Mehetre	Real-Time Automatic Camera Sabotage Detection for Surveillance Systems	Second International Symposium on Signal Processing and Intelligent Recognition Systems (SIRS)	75-84	Intelligent Recognition Techniques and Applications	Trivandrum , Kerala, India	2016
K. Sitara, Remya S	Image deblurring using Bayesian framework	Second International Conference, CCSIT 2012(AUC 3.0), LNICST, Springer	515-528	Computer Science and Information Technology	Bangalore	2012

(C) Books & Monographs

Book Chapter:					
Author(s)	Title of the Chapter	Title of Book/Monograph	Name of Publishers	Year of Publication	ISBN Number
K. Sitara, Manu V. T.	Security concerns and forensic aspects of IoHT	Smart and Secure Internet of Healthcare Things	CRC Press Taylor & Francis	2021	[Accepted]
K. Sitara and B. M. Mehetre	Anti-Forensics for Image and Video Tampering: A Review	Cryptographic and Information Security	CRC Press Taylor & Francis	2018	9780429435461