

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

Curriculum Vitae



Domnic Sandanam received the BSc degree in physics and the MCA degree from Bharathidasan University, India, in 1998 and 2001, respectively, and the PhD degree from Gandhigram Rural University, Gandhigram, India, in 2008. He is presently working as an Assistant professor in the Department of Computer Applications, National Institute of Technology, Tiruchirappalli, India. His current research interests are in data compression, Image/Video Analysis and information retrieval. He has published more than 30 research papers in National/International Conferences and Journals including highly reputed Journals. He has completed three research projects. He has reviewed many papers for conferences and journals. He has visited Malaysia, Singapore to attend and present research works. He is a life member of CS and IAENG.

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| 1. Name | : Dr.S.Domnic |
| 2. Designation: | : Assistant Professor |
| 3. Office Address: | : Computer Applications |
| 4. Telephone (Direct) (Optional): | |
| Telephone : | Extn (Optional): |
| Mobile (Optional): | |
| 5. Email (Primary): domnic@nitt.edu | Email (Secondary) : |
| 6. Field(s) of Specialization: | : Data Compression, Image/Video
Analysis, Information Retrieval |

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7. Employment Profile

Job Title	Employer	From	To
Member, Technical Staff	General Manager, SAI Technology, Chennai	Mar-2008	Nov-2008
Assistant Professor	Director, National Institute of Technology, Trichy	Dec-2008	Till now

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	Gandhigram Rural Institute-Deemed University	2008	Highly Commended	Computer Science & Applications
M.C.A	Bharadhidasan	2001	74.64	Computer Applications
B.Sc	Bharadhidasan	1998	80.10	Physics
Higher Secondary	TNSB	1995	87.33	Mathematics, Physics, Chemistry
High School	TNSB	193	86.2	NA

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
PAC Chairman	Computer Applications(CA)	2010	2016
Final Year Project Co-Coordinator	CA	2011	2016
Member, Doctoral Committee	CSE, CA	2015	2016
Ph.D Coursework Coordinator	Maths, CA, CSE	2010	2011

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Member, Doctoral	Anna University, Chennai	2012	2016

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Committee			
Member, Doctoral Committee	VIT, Vellore	2014	2016
Member, Doctoral Committee		2014	2016

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)
2005	GRI Fellowship	Gandhigram Rural Institute-Deemed University	2005	2006

13. Details of Academic Work

(i) Curriculum Development

Assisted to develop curriculum for M.Tech Data Analytics

(ii) Courses taught at Postgraduate and Undergraduate level

Computer Organization and Architecture
Organizational Behaviour
Resource Management Techniques
Replacement , Reliability and Network Models
Basics of Programming
Probability and Statistical Methods
Image Processing

(iii) Projects guided at Postgraduate level

More than 50 projects guided.

(iv) Other contribution(s)

Handling Labs : DBMS lab, OS&Network lab, Data Structures lab, Data Mining lab

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14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Internet Multimedia Search Engine for Information Retrieval in distributed Environment	DST	2010	2013	Completed
Detection of pectoral muscle and mass in mammogram image for early diagnosis of breast cancer to increase the life span of women	DST-Disha	2015	2016	Completed
Mobile Application Development	Qualcomm	2013	2014	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
GG.Lakshimi Priya	Temporal Video Segmentation and KeyFrame Extraction	Supervisor	2014
V.Glory	Inverted List Compression for Information Retrieval Systems	Supervisor	2015

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 25-26, 2005	NCCMM-2005	National	Paper presenter	GRI-DU	GRI-DU
7-9 Dec.2006	IEEE-ICSIP-2006	International	Paper presenter	BVB CET, Hubli	Karnataka, India,
Sept. 26-	IEE-VIE-	International	Paper presenter	IEE	Leela

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28, 2006	2006				Palace Bengalure
Nov 14-17, 2010	IEEE-PSIVT 2010	International	Paper presenter	IEEE, Singapore	Nanyang Tec.Univ. singapore
Dec 16-19, 2012	ICGVIP-MedImage-2012	International	Paper presenter	IIT Bombay	IIT Bombay
Dec 3-6, 2014	AIRS-2014	International	Paper presenter		Kuching Malaysia
5 th -10 th /01/ 2009	Technical Education Quality Improvement Programme	Local	Participant	NITTR, Chennai	NITTR, Chennai
13-17/07/09	Short Term Training Programme	Local	Participant	NITT	NITT
19/05/10	Workshop	Local	Participant	NITT	NITT
24/08/09	Workshop	Local	Participant	NITT	NITT
06/01/09	Invited lecture	Local	Participant	NITT	NITT
19/09/09	Training Programme	Local	Participant	NITT	NITT
12-13/03/09	Training Programme	Local	Participant	NITT	NITT
16/11 - 06/12/11	Refresher course	Local	Participant	Madras university, Chennai	Madras university, Chennai
08-13/08/16	Workshop	Local	Participant	NITT	NITT

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
Android Apps Development	Local	March, 27-28, 2014	Co-ordinator	MCA Lab, NITT
SAP HANA1.0-Big Data Management System	Local	September 10, 2014	Coordinator	A-2 Hall, NITT
Tools and Techniques for	Local	Sep,	Coordinator	Conference

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Information Processing Research		11&12 2015		Hall- CA Dept, NITT
Platforms for Big-Data Analytics	National	July, 15&16, 2016	Coordinator	A13 Hall, NITT

18. Invited Talks delivered

Topic	Date	Inviting Organization
Embedded Systems and Emerging Wireless technologies	21-08-2008	Vel's Srinivasa College of Engg. & Tech., Chennai
Algorithms and Data Structures	27-08-2008	SAI Technology, Chennai
Network Traffic Management Algorithms	28-08-2008	SAI Technology, Chennai
Introduction to Matlab	10-04-2010	SRIT, Coimbatore,
Data Compression	03.05.2010	GCT, Coimbatore
Vector Quantization and Its application	08/09/2011	MKU, Madurai
Feature Extraction for Image Analysis	03/01/2014	Madras University, Chennai
Mathematical foundations of Image Processing	21/11/2014	Madras University, Chennai
Mathematical Transforms for Image Analysis	25/11/2015	CIT, Coimbatore
Mathematical Transforms for Video Analysis	27/11/2015	NITT
Mathematical Transforms for Image Processing	29/02/2016	Gandhigram Rural Institute - Deemed University
Introduction to Data Science	18/03/2016	Govt. Arts College, Thuvakudi, Trichy

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	CSI	01153651, 2012
Life Member	IAENG	111643, 2011

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	Nov 14-17, 2010	Conference

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Malaysia	Dec 3-6, 2014	Conference
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21. Publications

(A) **Web of Science Indexed Journals (SCI, SCIE, ESCI):**

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
J. Nelson Raja, P. Jaganathan and S. Domnic	Variable length integer codes based on radix number system conversion	Electronic Letters	52	1385–1387	2016	
S.Domnic and V.Glory	Extended Rice Code and Its applications to R-Tree Compression	IETE Journal of Research	61	634-641	2015	
G.G.Lakshmi Priya and S.Domnic,	Walsh Hadamard Transform Kernel based Feature Vector for Shot Boundary Detection,	IEEE Trans. on Image Processing	23	5187-5196	2014	
G.G.Lakshmi Priya and S.Domnic	Shot based Keyframe Extraction for Ecological Video Indexing	Ecological Informatics	23	107-117	2014	
V. Glory, S. Domnic	Re-Ordered FEGC and Block Based FEGC for Inverted File Compression.	IJIRR	3	71-88	2013	
K.Somasundaram and S.Domnic	Extended Golomb Code for Integer Representation	IEEE Transactions on Multimedia	9	231-239	2007	

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Scopus Indexed Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
J. Nelson Raja, P. Jaganathan and S. Domnic,	A New Variable-length Integer Code for Integer Representation and Its Application to Text Compression	Indian Journal of Science and Technology	8	IPL0385	2015	
S.Domnic and K.Somasundaram	FAST AND LOW BIT RATE AMBTC IMAGE COMPRESSION SCHEME	International Journal of Computers and Applications	33	108-115	2011	

Other Indexed Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
J. Nelson Raja, P. Jaganathan and S. Domnic	Modified Golomb Code For Integer Representation	IJSRD	3	1100-1104	2016	
V. Glory, S. Domnic	Compressing Inverted Index Using Optimal FastPFOR	Journal of Information Processing	23	1-7	2015	
G.G.Lakshmi Priya and S.Domnic	Shot Boundary Detection Using Hilbert Transform based Features	ICTACT Journal On Image and Video Proc.	5	1001	1001-1009	
G.G.Lakshmi Priya and S.Domnic	Shot boundary based keyframe extraction for video summarization	International Journal of Computational Intelligence Studies	3	157-175	2014	

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G.G.Lakshmi Priya and S.Domnic	Medical video summarization using central tendency based shot boundary detection	International Journal of Computer Vision and Image Processing	3	55-65	2013	
G.G.Lakshmi Priya and S.Domnic	Detection of Abrupt and Gradual Transitions in Digital Video Sequences	International Journal of Information Processing	6	21-31	2012	
G.G.Lakshmi Priya and S.Domnic	Transition Detection Using Hilbert Transform and Texture Features	American Journal of Signal Processing	2	35-40	2012	
G.G.Lakshmi Priya and S.Domnic	Edge Strength Extraction using Orthogonal Vectors for Shot Boundary Detection	Procedia Technology	6	247-254	2012	
S.Domnic and V.Glory	Inverted File Compression Using EGC and FEGC	Procedia Technology	6	493-500	2012	

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Nelson Raja, P.Jeganathan, S.Domnic	Design of a New Variable-length integer code based on Integer Representation	Proceedings of ICECS 2016		International Conference on Electronics and Communication	Karpagam College of Engineering Coimbatore, Tamilnadu	2016
S.Domnic and V.Glory	Enhanced FASTPFOR for Inverted Index Compression	LNCS	221-229	Information Retrieval	Kuching, Malaysia	2014

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G.G.Lakshmi Priya and S.Domnic	Modified Color Layout Descriptor for Gradual Transition Detection	CCIS	421-428	Mathematical Modeling and Scientific Computation	GRI-DU	2012
G.G.Lakshmi Priya and S.Domnic	Video Shot cut detection using Least Square Approximation Method	CCIS	161-170	Information Processing	Bengalure, India	2011
B.Janet, A.V.Reddy and S.Domnic,	Incremental Codebook Generation for Vector Quantization in Large Scale Content Based Image Retrieval	Proc. of IEEE-Intl. Conf. on Computational Intelligence and Computing Research-2010	223-226	Computational Intelligence and Computing Research	Tamilnadu College of Engineering, Coimbatore	2010
G.G.Lakshmi Priya and S.Domnic	Video Cut Detection using Dominant Color Features	Proceedings of First Intl. Conf. on Intelligent Interactive Technologies and Multimedia-2010	130-134	Intelligent Interactive Technologies and Multimedia	Allahabad, India	2010
B.Janet, A.V.Reddy and S.Domnic	Vector Quantization Based Index Cube Model for Image Retrieval	IEEE-PSIVT-2010	27-32	Image and Video Technology	Nanyang Technological University, Singapore	2010
B.Janet, A.V.Reddy and S.Domnic	An Image Index Model for Retrieval	CCIS	465-467	Recent Trends in Business Administration and Information Processing	Trivandrum, Kerala, India.	2010
G.G.Lakshmi Priya and S.Domnic	Video Cut Detection using Block based Histogram differences in RGB color space	Proc. of IEEE-ICSIP-2010		signal and image processing	RMD Engineering College, Chennai	2010