Bio-data

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**Father's Name**
SH. NARESH CHANDRA JAIN

**Date of Birth**
May 17, 1967

**Present address**
Professor Computer Science
”Vigyan Bhawan” Block-A, New Campus
M.L. Sukhadia University
Udaipur – 313001 (Raj.)
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**Academic Qualifications**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Exam/Degree | Main sub. / Discipline | Board/Univ / Institution | Passing Year | Division | %age / C.G.P.A | Remarks |
| Ph. D.  | Computer Science & Engineering. | I.I.T. Delhi | 2004 | - | 8.0 |  |
| M.Tech. | Computer Applications | I.I.T. Delhi | 1993 | - | 8.16 |  |
| M. Sc. | Physics with spec. in Computer Sc | M.L.S.U. Udaipur Raj | 1989 | I | 62.5 % | II Position in University |
| B.Sc. B.Ed. | Phy. Chem. Maths. Electronics. Education | Regional coll. of Education Ajmer  -  a NCERT inst. | 1987 | Theory      I Internship I   | 73.2 %  74    % | Bhamashah Award by Maharana Mewar Foundation |
| Higher Secondary | Phy. Chem. Mathematics | Raj. Sec. Board | 1983 | I | 68.75 % |  |
| Secondary | Phy. Chem. Mathematics | Raj. Sec.  Board | 1982 | I | 66.67 % |  |

**My strengths:**

* **Excellent academic record.**
* **School topper in class 8th onwards and institute topper in U.G.**
* **M.Tech. in Computer Applications from IIT Delhi.**
* **PhD in Computer Science and Engineering from IIT Delhi.**
* **Qualified CSIR-UGC NET-JRF and GATE.**
* **Strong programming skills C, C++, VHDL, PASCAL, COBOL, PROLOG etc.**
* **Various platforms used Linux, Sun Solaris, Windows etc.**
* **Tools used SUIF, ADEX**

**Preferred research areas**

Embedded System Design, Algorithms, Data structures, Semantic Web

### Research Experience

|  |  |  |
| --- | --- | --- |
| Research Stage | Title of Work/ Thesis | University where the work was carried out |
| M.Tech. | FEEDBACK LOOP ANALYSIS USING FUZZY SETS | I.I.T. DELHI |
| Ph.D. | EXPLORING REGISTER FILE AND MEMORY ORGANIZATION IN ASIP SYNTHESIS | I.I.T. DELHI |
| Publications | Journal Publications **46**Book chapters **03**International conferences/Sym./ workshops **29**National Conferences/ Sym, Workshops **19**Technical Reports **02** | I.I.T. DELHI and MLSU Udaipur |
| Research Guidance**Completed**1. Dr. Dharam Singh

 Professor Computer  Science, University of  Science and Technology,  Namibia.1. Dr. Gajendra Ranka

Software Engg. Fujitsu Pune1. Sh. P.M. Jat

 Professor CSE  DAICT Gandhinagar Gujrat.1. Ms. Veena Ramnani

Assistant Professor in Computer Sc.Delhi University1. Ravi Khatwal
2. Neha Jain
3. Nayna Birla
4. Neha Songara

Students registered1. Abhijeet Sukhwal
2. Ankur Bhatnagar
3. Charul Bhanawat
4. Deepti Shrimal
5. Komal Meena
6. Naresh Kumar Janwa
7. Neelam Soni
8. Vandana Rao
 | Integrated System Design for Video on demand over IPAn Efficient Retargetable Simulator for ASIP Design-Space ExplorationQuerying Semantic WebAn Efficient Retargetable Compiler for ASIP Design-Space ExplorationAn Efficient Memory Design for Embedded SystemsDesigning an Efficient Network ProcessorA Text based Model for Automated Assessment of Online Learners in MOOCsEnergy-Efficient Consolidation in a Cloud Computing SystemTo be decidedTo be decidedTo be decidedASIP Design Space Exploration using MATLABTo be decidedTo be decidedTo be decidedTo be decided | MLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU UdaipurMLSU Udaipur |

**List of Publications of Dr. Manoj Kumar Jain**

**Journal Publications**

1. Lars Wehmeyer, Manoj Kumar Jain, Stefan Steinke, Peter Marwedel, and M. Balakrishnan, : “***Analysis of the Influence of Register File Size on Energy Consumption, Code Size and Execution Time***”, **IEEE TCAD**, Vol. 20, no. 11, **Nov. 2001**. Pages: 1329-1337.
2. Manoj Kumar Jain, M. Balakrishnan, and Anshul Kumar: “***An Efficient Technique for Exploring Register File size in ASIP Design***”, **IEEE TCAD**, Vol. 23, Issue 12, **December 2004**. Pages: 1693-1699.
3. Manoj Kumar Jain: “***ASIP: An Emerging Processor Technology***”, ITS Journal of I.T. and Management, **SYNERGY**, (**ISSN: 0972-7361**), Special issue on I.T., **September 2005**. Pages: 19-30.
4. Dharm Singh Jat, and Manoj Kumar Jain: “***Video on Demand over IP***”, **Journal of IEI**, Vol. 11, **September 2006**. Pages: 19-22.
5. Dharm Singh Jat, and Manoj Kumar Jain: “***Quality of Service in VoD over IP***”, **Journal of IEI**, Vol. 11, **September 2006**. Pages: 41-48.
6. Manish Dak, R C Verma and Manoj Kumar Jain: “***Mathematical Models for Prediction of Rheological Parameters of Pineapple Juice***”, International Journal of Food Engineering, **IJFE**, Vol. 4, Issue 3, Article 3, **2008**.
7. Dharm Singh, Chih-Heng Ke, M.K. Jain: “***Sizable Improvements for Reducing Packet Loss Rate in Video Transmission***”, IMS **MANTHAN**, ISSN-0974-7141(Print) ISSN-0976–1713(Online), Vol. 5, Issue 2 (CS), **December 2010**, Pages: 1-6.
8. Manoj Kumar Jain: “***Energy Reduction and Delay Minimization through ASIPs***”, International Journal of Power, Control Signals and Computation, **IJPCSC**, **ISSN : 0976-268X**, Vol. 2, No. 1, **March 2011**, Pages: 25-33.
9. Manoj Kumar Jain: “***FAST: A Fast ASIP Synthesis Technique***”, International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 2, No. 2, **April 2011**, Pages 418-421.
10. Deepak Gour, Manoj Kumar Jain: “***ASIP Design Space Exploration: Survey and Issues***”, International Journal of Computer Science and Information Security, **IJCSIS**, **ISSN: 1947-5500**, Vol. 9, No. 4, **April 2011**, Pages: 141-145.
11. Gajendra Kumar Ranka and Manoj Kumar Jain: “***An Efficient Retargetable Simulator for ASIP Design Space Exploration***”, International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 2, No. 3, **June 2011**, Pages: 587-594.
12. Veena Ramnani and Manoj Kumar Jain: “***Implementing ARM7TDMI-S through EXPRESSION ADL***”,International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 2, No. 3, **June 2011**, Pages: 595-599.
13. Gajendra Kumar Ranka and Manoj Kumar Jain: “***A Validation of SIM-A with OVPSim***”, Journal of Global Research in Computer Science, **JGRCS**, **ISSN: 2229-371X**, Vol. 2, No. 6, **June 2011**, Pages: 93-100.
14. Manoj Kumar Jain: “***Wireless Sensor Networks: Security Issues and Challenges***”, International Journal of Computer and Information Technology, **IJCIT**, **ISSN: 2078-5828 (Print), ISSN: 2218-5224 (Online)**, **IJCIT 2011**, Vol. 2, No. 1, **July 2011**, Pages: 62-67.
15. Manoj Kumar Jain: “***A Multi Layer Technique for Performance Estimation for ASIP Design Space Exploration***”, International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 2, No. 4, **August 2011**, Pages 648-653.
16. Manoj Kumar Jain and Gajendra Kumar Ranka: “***Validating SIM-A Simulator with ARM Based Keil***”, International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 2, No. 4, **August 2011**, Pages: 654-659.
17. Gajendra Kumar Ranka and Manoj Kumar Jain: “***Verifying and Substantiating SIM-A with Simplescalar***”, International Journal of Computer Science and Technology, **IJCST 2011**, **ISSN: 2229-4333 (Print)**, **ISSN: 0976-8491 (Online)**, Vol. 2, Issue 3, **September 2011**, Pages: 171-176.
18. Manoj Kumar Jain and Gajendra Kumar Ranka: “***VLIW based VEX Tool and Validation of SIM-A with VEX***”, Journal of Global Research in Computer Science, **JGRCS**, **ISSN: 2229-371X**, Vol. 2, No. 9, **September 2011**, Pages: 4-9.
19. Pokhar Mal Jat, Manoj Kumar Jain and Deepak Sengar: “***Ranking of Resulting Objects and Snippet Generation of Falcons***”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-8887**, Special Issue on **IP Multimedia Communications**, **October 2011**, Pages: 151-154.
20. Manoj Kumar Jain and Veena Ramnani: “***Register Allocation and Instruction Scheduling for an Efficient Retargetable Compiler***”, International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 2, No. 5, **October 2011**, Pages: 6-11.
21. Pokhar Mal Jat and Manoj Kumar Jain: “***Publishing and Querying Linked Data- Case Study Technical Student Profiles***”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Special issue on **Communication and Networks**, No. 8, **December 2011**, Pages: 31-34.
22. Manoj Kumar Jain: “***An Efficient Expert System Generator for Qualitative Feed-Back Loop Analysis***”, International Journal on Broad Research in Artificial Intelligence and Neuroscience, **BRAIN**, Vol. 3, Issue 1, **February 2012**, **ISSN 2067-3957 (online)**, **ISSN 2068 - 0473 (print)**, Pages: 5-18.
23. Manoj Kumar Jain and Veena Ramnani: “***Developiong a Retargetable Compiler for MIPS32k and ARM7TDMI-S***”, Journal of Global Research in Computer Science, **JGRCS**, **ISSN: 2229-371X**, Vol. 3, No. 2, **February 2012**, Pages: 29-34.
24. Manoj Kumar Jain: “***An Efficient Expert System Generator for Qualitative Feedback Loop Analysis***”, International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 3, No. 1, **February 2012**, Pages 468-475.
25. Manoj Kumar Jain and Deepak Gour: “***Comparison between the Simulator and Scheduler based approach of Design Space Exploration for Application Specific*** ***Instruction set Processor*”,** International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 43, No. 5, **April 2012**, Pages 14-19.
26. Manoj Kumar Jain and Gajendra Kumar Ranka: “***An Efficient Retargetable Simulator SIM-A for ASIP DSE and Validation with RISC and VLIW based Processors***”, International Journal of Advanced Research in Computer Science, **IJARCS**, **ISSN: 0976-5697**, Vol. 3, No. 2, **April 2012**, Pages: 11-22.
27. Manoj Kumar Jain and Veena Ramnani: “***Verifying and Substantiating Functions in MIPS***”, Journal of Global Research in Computer Science, **JGRCS**, **ISSN: 2229-371X**, Vol. 3, No. 12, **December 2012**, Pages: 8-11.
28. Manoj Kumar Jain and Veena Ramnani: “***Design Space Exploration for a Custom VLIW architecture***”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 61, No. 8, **January 2013**, Pages: 31-34.
29. Ravi Khatwal and Manoj Kumar Jain: “***An Efficient Synchronous Static Memory Design for Embedded System***”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 66, No. 18, **March 2013**, Pages: 39-45.
30. Manoj Kumar Jain and Ravi Khatwal: “***High Performance Simulator Analyzing the Efficient Cache Memory Simulation Behavior***”, International Journal of Soft Computing and Engineering, **IJSCE**, **ISSN: 2231-2307**, Vol. 3, Issue 1, **March 2013**, Pages: 1-6.
31. Mahendra Pratap Singh and Manoj Kumar Jain: “***Evolution of Processor Architecture in Mobile Phones***”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 90, No. 4, **March 2014**, Pages: 34-39.
32. Ravi Khatwal and Manoj Kumar Jain: “***Application Specific Cache Simulation Analysis for Application Specific Instruction Set Processor***”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 90, No. 13, **March 2014**, Pages: 31-41.
33. Ravi Khatwal and Manoj Kumar Jain: “***Application Specific Hardware Design Simulation for High Performance Embedded***”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 96, No. 10, **June 2014**, Pages: 55-66.
34. Neha Jain and Manoj Kumar Jain: “Current Status of Network Processors”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 98, No. 12, **July 2014**, Pages: 47-51.
35. Mahendra Pratap Singh and Manoj Kumar Jain: “A Survey of Reconfigurable Architectures”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 98, No. 14, **July 2014**, Pages: 35-40. **DOI: 10.5120/17254-7599**.
36. Deepti Shrimal and Manoj Kumar Jain: “Instruction Customization: A Challenge in ASIP Realization”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 98, No. 15, **July 2014**, Pages: 22-26.
37. Ravi Khatwal and Manoj Kumar Jain: “MIPS Integrated Architectural Memory Design Synthesis for Low Power Embedded Devices”, International Journal of Computer Applications, **IJCA**, **ISSN: 0975-5887**, Vol. 108, No. 13, **December 2014**, Pages: 13-23.
38. Ravi Khatwal and Manoj Kumar Jain: “An Integrated Architectural Clock Implemented Memory Design Analysis”, International Journal of Advanced Computer Science and Applications, **IJACSA**, **ISSN: 2156-5570**, Vol. 6, No. 7, **2015**, Pages: 113-124.
39. Ravi Khatwal and Manoj Kumar Jain: “An Integrated Architectural Clock Implemented Memory Design for Embedded System”, International Journal of Reconfigurable and Embedded Systems, **IJRES**, **ISSN: 2089-4864**, Vol. 4, No. 2, **July** **2015**, Pages: 129-141.
40. Ravi Khatwal and Manoj Kumar Jain: “***An Efficient Application Specific Memory Storage and ASIP Behavior Optimization in Embedded System***”, International Journal of Advanced Computer Science and Applications, **IJACSA**, **ISSN: 2156-5570**, Vol. 7, No. 7, **July** **2016**, Pages: 179-190.
41. Ravi Khatwal and Manoj Kumar Jain: “***An Effective Reconstruction of Replica Memory Design Optimization for Embedded System***”, International Journal of Electronics Engineering Research, **IJEER**, **ISSN: 0975-6450**, Vol. Vol. 9, No. 4, **2017**, Pages: 557-586.
42. Neha Jain and Manoj Kumar Jain: “***Profiling and Synthesis of Leaky Bucket Algorithm for Network Processor***”, International Journal of Engineering Research in Computer Science and Engineering, **IJERCSE**, **ISSN:2394-2320**, Vol. 5, No. 1, **January 2018**, Pages: 129-137.
43. Neha Jain and Manoj Kumar Jain: “***A Design of Intel’s IXP Meant for Embedded Systems***”, International Journal of Recent Technology and Engineering, **IJRTE**, **ISSN: 2277-3878**, Vol. 8, No. 2, **July 2019**, Pages: 3476-3482.
44. Nayna Birla, Manoj Kumar Jain and Avinash Panwar: “***Automated assessment of subjective assignments: A hybrid approach***”, Expert System with Applications, **ESA**, **ELSEVIER International Journal**, **ISSN: 0957-4174**, **IMPACT FACTOR: 8.5**, First Online: 29 April 2022, Vol. 203, No. 117315, **1 October 2022**, Pages: 117315, Link: https://doi.org/10.1016/j.eswa.2022.117315.
45. Neha Songara and Manoj Kumar Jain: “***MRA-VC: Multiple Resources Aware Virtual Machine Consolidation using Particle Swarm Optimization***”, International Journal of Information Technology**, IJIT**, **SPRINGER SIGAPORE**, **Electronic ISSN: 2511-2112, PRINT ISSN: 2511-2104**, Vol. 15, Issue 2, **First Online: 02 October 2022**, Issue Date: **February 2023**. Pages: 697-710. Link: https://doi.org/10.1007/s41870-022-01102-9.

**Book Chapters**

1. Anshul Kumar, M. Balakrishnan, Manoj Kumar Jain, and Anup Gangwar: “***Customizing Embedded Processors for Specific Applications***” in the Book titled “Recent Trends in Practice and Theory of Information Technology”, Viva Books (**ISBN: 8130901714**), **Jan 2005**. Pages: 261-284.
2. Dharm Singh Jat, Chih-Heng Ke, Manoj Kumar Jain, “***Throughput Performance of an IP Differentiated-Services Network for Video Communication***”, **Lecture Notes in Computer Science, LNCS, ISSN0302-9743 (Print) 1611-3349 (Online)**, Volume 5353/2008, Book: “Advances in Multimedia Information Processing - **PCM 2008**”, **ISBN978-3-540-89795-8**. Pages 218-227.
3. Neha Songara and Manoj Kumar Jain, “***Design of QoS and Energy Efficient VM Consolidation Framework for Cloud Data Centers***”, In: Gunjan V., Senatore S., Kumar A., Gao XZ., Merugu S. (eds), Advances in Cybernetics, Cognition, and Machine Learning for Communication Technologies. Lecture Notes in Electrical Engineering**, LNEE**, **PRINT ISBN: 978-981-15-3124-8**, **Online ISBN: 978-981-15-3125-5**, Vol 643. **SPRINGER** **SINGAPORE, 29 April 2020**. Pages: 171-179, DOI: [https://doi.org/10.1007/978-981-15-3125-5 19](https://doi.org/10.1007/978-981-15-3125-5%2019).

**International Conferences/ Workshops/ Symposium**

1. Manoj Kumar Jain, M. Balakrishnan, and Anshul Kumar: “***ASIP Design Methodologies: Survey and Issues***”, Proceedings of the **IEEE** Fourteenth International Conference on VLSI Design, **VLSI** **2001**, **3-7 Jan. 2001**, **Bangalore**, **India**, **ISBN: 0-7695-0831-6**, Pages: 76-81.
2. Lars Wehmeyer, Manoj Kumar Jain, Stefan Steinke, Peter Marwedel, and M. Balakrishnan: “***Using an Energy Aware Compiler Framework to Evaluate Changes in Register File Size towards ASIP-Design***”, **ACM** Fifth International Workshop on Software and Compilers for Embedded Systems, **SCOPES 2001**, **20-22 March, 2001**, **St. Goar**, **Germany**.
3. Manoj Kumar Jain, Lars Wehmeyer, Stefan Steinke, Peter Marwedel, and M. Balakrishnan: “***Evaluating Register File Size in ASIP Design***”, Proceedings of the **ACM** Ninth International Symposium on Hardware/ Software Codesign, **CODES 2001**, **25-27 April, 2001**, Copenhagen, Denmark, **ISBN: 1-58113-364-2**, Pages: 109-114.
4. Manoj Kumar Jain, M. Balakrishnan, and Anshul Kumar: “***An Efficient Technique for Exploring Register File Size in ASIP Synthesis***”, Proceedings of the **ACM** Fifth International Conference on Compilers, Architecture and Synthesis for Embedded Systems, **CASES 2002**, **8-11 October, 2002**, **Grenoble**, **France**, **ISBN: 1-58113-575-0**,Pages: 252-261.
5. Manoj Kumar Jain, M. Balakrishnan, and Anshul Kumar: “***Exploring Storage Organization in ASIP Synthesis***”, Proceedings of **IEEE** Euromicro Symposium on Digital System Design, **Euro-DSD 2003**, **1-6 September, 2003**, **Beltek Near Antalya**, **Turkey**, **ISBN 0-7695-2003-0**, Pages: 120-125.
6. Manoj Kumar Jain, M. Balakrishnan, and Anshul Kumar: “***Integrated On-chip Storage Evaluation in ASIP Synthesis***”, Proceedings of the **IEEE** Eighteenth International Conference on VLSI Design with Fourth International Conference on Embedded System Design, **VLSI 2005**, **3-7 January, 2005**, **ISBN 0-7695-2264-5**, Pages: 274-279.
7. Dharm Singh, and Manoj Kumar Jain, “***Simulation and Analysis of FIFO/ Drop-Tail and RED Scheduling and Queuing Management Schemes in IP Networks***”, International Conference on Intelligent system and Networks, **IISN-2007**, **23-25 February 2007**, **Jagadhri**, **India**, Pages: 738-743.
8. Dharm Singh, and Manoj Kumar Jain, “***Analysis of Quality-of-Service Parameters with Video Traffic in IP Based Control Systems***”, International Conference on Recent Advancements and Applications of Computer in Electrical Engineering, **RACE 2007**, **24-25 March 2007**, **Bikaner**, **India**.
9. Dharm Singh, and Manoj Kumar Jain, “***MPEG-4 Video Transmission over IP Network***”, International Conference on Information & Communication Technology, **IICT 2007**, **26-28 July, 2007**, **DIT** **Dehradun**, Pages: 179-184.
10. Dharm Singh Jat, and Manoj Kumar Jain, “***DiffServ Marking Algorithm in Video Server***”, International Conference on Intelligent System & Networks, **ISSN 2008**.
11. Manoj Kumar Jain, “***ICT : An Emerging Need of Future in Indian Context***”, **Key Note Speech** at International Conference on Management, **INCOM 2008**, **22-24 September, 2008**, **Udaipur**, **India**.
12. Manoj Kumar Jain, “***Development of an Expert System Generator using Fuzzy Sets***”, International Conference on Management, **INCOM 2008**, **22-24 September, 2008**, **Udaipur**, **India**. Edited Book: “Managing Global Competition- A Holistic Approach”, Macmillan Publication. **ISBN 10: 0230-63646-2** and **ISBN 13: 978-0230-63646-0**. Pages: 509-517.
13. Manoj Kumar Jain and Gajendra Ranka, “***Recent Trends in Processor Technology***”, International Conference on Management, **INCOM 2008**, **22-24 September, 2008**, **Udaipur**, **India**.
14. Manoj Kumar Jain and Deepak Gour, “E***-Governance – Challenges, Solutions & Implementations***”, International Conference on Management, **INCOM 2008**, **22-24 September, 2008**, **Udaipur**, **India**.
15. Manoj Kumar Jain: “***ICT: An Emerging Need***”, Aishwarya Research Communication, Special issue Multidisciplinary International Conference: Emerging Issues and Global Economic Senario, Focus: Emerging Trends in ICT (**August 21-24, 2009**), **ISSN: 0975-3613**, Vol. 1, **August 2009**. Pages: 175-182.
16. Gajendra Kumar Ranka and Manoj Kumar Jain: “***Simulator Based Architecture Exploration***”, Aishwarya Research Communication, Special issue Multidisciplinary International Conference: Emerging Issues and Global Economic Senario, Focus: Emerging Trends in ICT (**August 21-24, 2009**), **ISSN: 0975-3613**, Vol. 1, Part 2, **March 2010**. Pages: 46-52.
17. Manoj Kumar Jain and Deepak Gour: “***Application of ASIP in Wireless Sensor Networks***”, Aishwarya Research Communication, Special issue Multidisciplinary International Conference: Emerging Issues and Global Economic Senario, Focus: Emerging Trends in ICT (**August 21-24, 2009**), **ISSN: 0975-3613**, Vol. 1, Part 2, **March 2010**. Pages: 85-91.
18. Manoj Kumar Jain: “***An Efficient Expert System Generator***”, Aishwarya Research Communication, Special issue Multidisciplinary International Conference: Emerging Issues and Global Economic Senario, Focus: Emerging Trends in ICT (**August 21-24, 2009**), **ISSN: 0975-3613**, Vol. 1, Part 2, **March 2010**. Pages: 105-110.
19. Veena Ramnani and Manoj Kumar Jain: “***Reviewing the EXPRESSION Framework***”, Aishwarya Research Communication, Special issue Multidisciplinary International Conference: Emerging Issues and Global Economic Senario, Focus: Emerging Trends in ICT (**August 21-24, 2009**), **ISSN: 0975-3613**, Vol. 1, Part 2, **March 2010**. Pages: 296-304.
20. Manoj Kumar Jain, “***Impact of Denial-of-Service in Security Protocols***”, **IEEE** International Conference on Emerging Trends in Networks & Computer Communications, **ETNCC 2011**, **IEEE Explore**, **Print ISBN: 978-1-4577-0239-6**, **INSPEC Accession Number: 12121420**, **Digital Object Identifier: 10.1109/ETNCC.2011.5958503**, **22-24 April 2011**, Pages: 142-147.
21. Mahendra Pratap Singh and Manoj Kumar Jain, "***ISA customization for application specific instruction set processors***”, International Conference on Pervasive Computing (ICPC), Pune, India, 8-10 January 2015, **IEEE Xplore Electronic ISBN: 978-1-4799-6272-3**, **INSPEC Accession Number: 15058415, Date added on IEEE Xplore: 16 April 2015**, Pages: 1-4, **DOI: 10.1109/PERVASIVE.2015.7087117**.
22. Neha Jain and Manoj Kumar Jain, “***Synthesis of Aho-Corasick Algorithm for Network Processor***”, International Conference on Mechatronics and Embedded System, **ICMES** **2017**, **December 2017**, Pages: 127-133.
23. Neha Jain and Manoj Kumar Jain, “***Synthesis of Sliding Window Protocol with Piggybacking***”, International Conference on Advanced Computer Science and Information Technology, **ICACSIT 2017**, **December 2017**, Pages: 154-159.
24. Naresh Kumar Janwa and Manoj Kumar Jain, “***Identification of Research Gaps in an Efficient Designing of Application Specific Instruction Set Processor (ASIP) for Neural Prosthetics***”, Proceedings of Second International Conference on Advanced Computing and Software Engineering, **ICACSE, 2019**, **8 February 2019**, **Posted: 11 April 2019**, Pages: 112-115. **ELSEVIER** Publication. **SSRN** **id 3349573.pdf**.
25. Neha Songara and Manoj Kumar Jain, “***Exploring Cloud Computing for E-Learning***”, International Conference on ICT- Innovations, Applications, Trends and Research, **ICT-IATR 2021**, **16 July 2021**.
26. Nayna Birla, Manoj Kumar Jain and Avinash Panwar, “***A Systematic Review of Text Mining Approaches in Automated Assessment***”, International Conference on ICT- Innovations, Applications, Trends and Research, **ICT-IATR 2021**, **16 July 2021**.
27. Deepti Shrimal and Manoj Kumar Jain, “***A Study of Design Space Exploration Approaches for Application Specific Processors***”, International Conference on ICT- Innovations, Applications, Trends and Research**, ICT-IATR 2021**, **16 July 2021**.
28. Ankur Bhaknagar and Manoj Kumar Jain, “***Research on Network Security Intrusion Detection based on Machine Learning***”, International Conference on ICT- Innovations, Applications, Trends and Research, **ICT-IATR 2021**, **16 July 2021**.
29. Komal Meena and Manoj Kumar Jain, “***A Taxonomy of Studies for Improving Security using IoT Systems for Smart City***”, International Conference on ICT- Innovations, Applications, Trends and Research, **ICT-IATR 2021**, **16 July 2021**.

**National Conferences/ Workshops/ Symposium**

1. Chih-Heng Ke, Dharm Singh Jat, and Manoj Kumar Jain, “***Simulation and Analysis of Video over Diffserv IP Networks***”, Proceedings of 22nd Indian Engineering Congress, **IEC 2007**, 14-16 December 2007, Udaipur, Pages: 84-91.
2. Dharm Singh Jat, Chih-Heng Ke, and Manoj Kumar Jain, “***Active Queue Management in Diffserv Networks***”, Proceedings of 22nd Indian Engineering Congress, **IEC 2007**, 14-16 December 2007, Udaipur, Pages: 92-99.
3. Veena Ramnani, and Manoj Kumar Jain, “***Challenges in Retargetable Compiler Technology***”, Proceedings of 22nd Indian Engineering Congress, **IEC 2007**, 14-16 December 2007, Udaipur, Pages: 193-197.
4. Dharm Singh Jat, and Manoj Kumar Jain, “Managing ***Bandwidth – The User Based Approach***”, Proceedings of 22nd Indian Engineering Congress, **IEC 2007**, 14-16 December 2007, Udaipur, Pages: 198-203.
5. Gajendra Kumar Ranka, and Manoj Kumar Jain, “***Issues in Retargetable Simulators***”, Proceedings of 22nd Indian Engineering Congress, **IEC 2007**, 14-16 December 2007, Udaipur, Pages: 212-216.
6. Manoj Kumar Jain and Deepak Gour, “***Challenges in ASIP Design***”, Third National Conference on Methods and Models 8-9 December 2009, JNU Delhi. **ISBN: 978-81-8424-432-8**. Pages: 33-42.
7. Gajendra Kumar Ranka and Manoj Kumar Jain, “***ASIP*** ***based Simulator and Multimedia Applications for Rural Development***”, Proceedings of All India Seminar, Computer Division, The Institution of Engineers (India), **September 2009**, 11-13 September 2009, Udaipur, India. **ISBN: 978-81-7906-197-8**. Pages: 69-72.
8. Manoj Kumar Jain and Deepak Gour, “***Implementation of E Governance with ASIP***”, Proceedings of All India Seminar, Computer Division, The Institution of Engineers (India), **September 2009**, 11-13 September, 2009, Udaipur, India. **ISBN: 978-81-7906-197-8**. Pages: 121-122.
9. Manoj Kumar Jain and Veena Ramnani, “***Trends in Retargetable Compiler Technology: Critical Analysis of EXPRESSION Framework***”, Proceedings of **National Conference on ICT: Theory, Applications and Practices**, **March 2010**, 5-6 March, 2010, SPSU Udaipur, India. Pages: 54-58.
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13. Deepak Gour and Manoj Kumar Jain, “***Event Detection in Wireless Sensor Networks: Survey and Issues***”, Proceedings of **National Conference on ICT: Theory, Applications and Practices**, **March 2010**,5-6 March 2010, SPSU Udaipur, India. Pages: 205-211.
14. Deepak Gour and Manoj Kumar Jain, “***Web based Knowledge Gathering: Towards an Intelligent Web***”, Proceedings of **National Conference on ICT: Theory, Applications and Practices**, **March 2010**, 5-6 March, 2010, SPSU Udaipur, India. Pages: 445-450.
15. Sudanshu Dwivedi, Pokarmal Jat and Manoj Kumar Jain, “***Ontology Matching – Approaches and Method***s”, Proceedings of **National Conference on ICT: Theory, Applications and Practices**, **March 2010**, 5-6 March, 2010, SPSU Udaipur, India. Pages: 451-457.
16. Manoj Kumar Jain: “***Information and Communication Technology Expansion using Fuzzy Sets***”, Aishwarya Research Communication, Special issue National Conference: Educational Reforms: Insights and Analysis (October 1-3, 2010), **ISSN: 0975-3613**, Vol. 2, Part 1, **October 2010**. Pages: 79-85.
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19. Manoj Kumar Jain: “***Role of ICT in Rural Development of India***”, Aishwarya Research Communication, Special issue National Conference: Educational Reforms: Insights and Analysis (October 1-3, 2010), **ISSN: 0975-3613**, Vol. 2, Part 1, **October 2010**. Pages: 253-259.

# Technical Reports

1. Manoj Kumar Jain, M. Balakrishnan, and Anshul Kumar: “***ASIP Design Methodologies: Survey and Issues***”, **Technical Report TR #2000/23**, Embedded System Project, Department of Computer Science and Engineering, Indian Institute of Technology, Delhi.
2. Manoj Kumar Jain, Lars Wehmeyer, Peter Marwedel, and M. Balakrishnan: “***Register File Synthesis in ASIP Design***”, **Technical Report #746 07.12.2000**, Lehrstuhl Informatik XII, University of Dortmund, Germany.
3. Seminars, Conferences, Symposia, Workshops etc. attended.

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Seminar/ Conference/ Symposia workshop, etc. | Name of the Sponsoring Agency | Place and Date | Participation |
| International Conference on VLSI Design 2001 | VSI | Bangalore, 3-7 January, 2001 | Attended, Paper Presented |
| CASES 2002 | CSIR and the Conference Organizers. | France, 8-11 October, 2002 | Attended, Paper Presented |
| International Conference on VLSI Design 2003 | VSI | NewDelhi, 4-8 January, 2003 | Attended |
| Indian Engineering Congress | Institute of Engineers India | Udaipur, 14-16 December, 2007 | Attended, Papers Presented |
| International Conference on Management | MLSU | Udaipur, 22-24 September, 2008 | Key note Speaker, Attended, Papers Presented |
| Multidisciplinary International Conference: Issues and Global Economic Senario, Focus: Emerging Trends in ICT | Aishwarya College | Udaipur, 21-24 August, 2009 | Session coordinator, Attended, Papers Presented |
| All India Seminar, The Institutions of Engineers (India) | Institute of Engineers India | Udaipur, September 2009 | Key note Speaker, Attended, Papers Presented |
| Third National Conference on Methods and Models | JNU | JNU Delhi, 8-9 December 2009 | Attended, Paper Presented |
| International Conference on Advanced Computing and Creating Entrepreneurs | Society of Computer Professionals | Udaipur, 12-13 February, 2010 | Session co-chair |
| National Conference on ICT: Theory, Applications and Practices | SPSU | SPSU Udaipur, 5-6 March, 2010 | Invited Talk, Attended, Papers Presented |
| National Conference: Educational Reforms: Insights and Analysis (October 1-3, 2010) | Aishwarya College | Udaipur, 1-3 October, 2010 | Session co-chair, Attended, Papers Presented |
| International Conference on Emerging Trends in Networks & Computer Communications, ENTCC 2011 | Institute of Engineers India, CSI, IEEE | Udaipur, 22-24 April, 2011 | Session chair, Invited Speaker, Paper Presented |
| 2nd International Conference on Advance Computing and Creating Entrepreneurs | Society of Computer Professionals | Udaipur, 19-20 February, 2013 | Session co-chair |

(E) (iii) Invited Lectures and Chairmanship at national or international conference/seminar etc.

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| --- | --- | --- | --- | --- |
| **S. No.** | **Title of Lecture/Academic Session** | **Title of Conference/Seminar etc.** | **Organised by** | **Whether International/national** |
| 1. | On-Chip Storage Exploration in ASIP Synthesis | VLSI Education Workshop at Hotel Clarks, Jaipur, 8.3.2005 to 12.3.2005 | VSI and MNIT Jaipur | National |
| 2. | ICT : An Emerging Need of Future in Indian Context | International Conference on Management, **INCOM 2008** | MLSU | International |
| 3. | Embedded Systems | International Conference: Emerging Issues and Global Economic Senario, Focus: Emerging Trends in ICT, August 21-24, 2009 | AIM Udaipur | International |
| 4. | ICT : An Emerging Need of Future in Indian Context | All India Seminar, Computer Division, The Institution of Engineers (India), September 2009 | Institute of Engineers (India) | National |
| 5. | Advanced Computing | International conference on Advance computing and creating entrepreneurs(ICOACCE 2010) February 12-13, 2010 | Society of Computer Professionals | International |
| 6. | Computer Networks (Wired and Wireless Technologies) | National Conference on ICT: Theory, Applications and Practices, 5-6 March 2010 | SPSU Udaipur | National |
| 7. | Initiative and Reforms in I.T. and their Analysis | National Conference: Educational Reforms: Insights and Analysis, October 1-3, 2010 | AIM Udaipur | National |
| 8 | VLSI and Embedded System | **IEEE** International Conference on Emerging Trends in Networks & Computer Communications, **ENTCC 2011**, 22-24 April 201 | Institute of Engineers India, CSI, IEEE | International |
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