

RESUME

1. **Name:** Dr. K. Shyamala
2. **Designation:** Professor
3. **Place of Work:** Department of Computer Science and Engineering, UCE(A),
Osmania University, Hyderabad.

4. Academic Qualifications:

1. B.E in Computer Science and Engineering from Osmania University in the year 1992.
2. M.Tech in Computer Science and Engineering from Osmania University in the year, 2000.
3. PhD in Computer Science and Engineering from IIT Madras, Chennai in the year 2013.

Title of the PhD thesis: Power, Area and Performance Optimization Techniques for Look Up Table based FPGAs.

5. Research Publications: 11

I. Publications in International Journals:

1. **Shyamala K**, V Kamakoti and Vimal Kumar J, "Novel SAT-based Peak Dynamic Power Estimation for Digital Circuits", *Journal of Low Power Electronics*, Vol. 5, No.4, pp 1-10, **Dec 2009**.
2. **Shyamala K** and V Kamakoti, "ReMap: A Novel Peephole Optimization Technique for LUT-based FPGAs", *Journal of Low power Electronics*, Vol 10, No.1, pp 20-31, **March 2014**.

II. Publications in International Conference:

3. **Shyamala K**, V Kamakoti and Shoab K, "Peak Dynamic Power Estimation for FPGA-mapped Digital Designs", *International Symposium on VLSI Design And Test*, **July 2009**, pp 151-164.
4. **Shyamala K**, Suresh Kumar Lokhande, Ravi babu P, "Instruction Prefetching using Basic block Prediction", *IEEE International Conference on Electronics Design*, **Dec 2009**, pp 12-16.
5. **Shyamala K**, and Lokhande Suresh Kumar, "Efficient Backup Routing Scheme in AODV With Unidirectional links", *IEEE International Conference on Computing and Communication (INDICON)*, **Dec 2011**.
6. Ravi Babu P, **Shyamala K**, Srinivasa Rao K, "Monte Carlo Simulation on GPGPU using Prefix Computation Method", *IEEE International Conference on Electrical, Computer and Communication Technologies*, **5-7 March 2015**.

7. **Shyamala K** and P Ravibabu, “Energy Based Multipath Routing in MANETs”, *12th IEEE International Conference (INDICON 2015) on Electronics, Energy, Environment, Communication, Computer, Control, (E3-C3), New Delhi during 17th -20th Dec 2015.*
8. **Shyamala K** and Mallesham Dasari “On Adaptive Motion Estimation in Video Coding Based on Video Content Analysis”, *IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI’16) 21-24 September 2016.*
9. **Shyamala K**, Raj Kiran K, Rajeshwari, “ Design and Implementation of GPU-based Matrix Chain Multiplication Using C++ AMP”, *IEEE International Conference on Electrical, Computer, and Communication Technologies (ICECCT’17), 22-24 Feb 2017.*

III. Publications in National Conference:

10. **Shyamala K**, and Lokhande Suresh Kumar, “Power-based Routing in MANETs”, *National Conference on Communication, Computation, Control and Automation, pp 1-4, April 2010.*
11. **Shyamala K**, and Lokhande Suresh Kumar, “Energy-based Multipath Routing in MANETs”, *National Conference on Communication, Computation, Control and Automation, pp 11-16, April 2010.*

IV. Details of Books Published:

1. Shyamala K and Dr K.V.K . K Prasad, “ **VLSI Design- A Comprehensive Coverage of VLSI Implementation Technologies, Electronic Design Automation Tools and FPGA Design**”, Black Book Series, *Dream tech Press, pp 1-350.*

6. Research Projects:

Project titled: “Design and Implementation of Parallel Algorithm to find Minimum Spanning Tree for Large Graphs” received grant of Rs 1 Lakh from TEQIP-II in the year 2015-16.

7. Research Guidance:

1. M.Tech Projects: 23
2. PhD Students : 8 (joined in the year 2016 and 2017)

8. Contributions at the Departmental Level:

1. Departmental Convener for M. Tech (CSE) admissions (2001-2003, 2009-2011, 2013)
2. Faculty advisor for the M Tech (CSE and PDS) students (2008 – till date)
3. Departmental Co-ordinator (NBA): Involved in preparation of NBA - Self-Assessment Report (UG and PG) of the CSE department.

4. Involved in curriculum development since 2007 as Member/Invitee BOS in CSE (A), CSE (University) and IT.

9. Contributions at the College/University Level/State Level:

1. Chairperson, Board of Studies in CSE (A) (2013-2016)
2. Assistant Chief Warden for University Girls Hostel (2008- 2016)
3. Chairperson, Board of Studies in IT.
4. Director, University Computer Center, Osmania University
5. Member of Telangana State Council of Higher Education, Hyderabad.
6. Coordinator, QIP-Admissions, Osmania University

10. Workshops/Conferences Organized:

1. **Convener of 3-day IEEE International Conference on Computing and Communication Technologies (ICCCT '14) during 11-13 December 2014.**
2. **Coordinator of 2-day National workshop on Network Security Championship**, jointly organized by the IIT Bombay and Dept. of Computer Science and Engineering, **July 2013.**
3. **Coordinator of 2-day National Workshop on Adobe**, jointly organized by the Dept. of Computer Science and Engineering and ACM student chapter, **Oct 2013.**
4. **Coordinator of 5-day Faculty Development Program on MASTER TRAINING IN FSIT Technical Skills Under TEQIP-II**, jointly organized by NASSCOM and SPFU at University College of Engineering, OU, Hyderabad. during **21st - 28th October 2013.**
5. **Coordinator of 3-day National Workshop on Embedded Systems**, jointly organized by the Dept. of Computer Science and Engineering and Institute of Government Polytechnic College, during **26-28 June 2008.**
6. **Coordinator of 2-day National Workshop on "Embedded Systems"**, organized by the Dept. of Computer Science and Engineering, during **16 -17 March 2009.**
7. **Coordinator of 2-day National Workshop on "Soft Computing"**, organized by the Dept. of Computer Science and Engineering, during **30-31 March 2009.**
8. **Coordinator of 21-day Short term course on "Refresher Course in IT Education"**, organized by the Academic Staff College, Osmania University, 2010.
9. **Staff Co-ordinator of INFINITY 2008 and 2009:** A National Level Technical Symposium organized by the students of Dept. of Computer Science and Engg, University College of

Engg, OU, **2008 and 2009.**

10. **Staff Co-ordinator of INFINITY 2011 and 2012:** A National Level Technical Symposium organized by the students of Dept. of Computer Science and Engg, University College of Engg, OU, **2011 and 2012.**
11. **Teaching Assistant at Indian Institute of Technology, Madras** Assisted in Research laboratory for the course CAD for VLSI, Digital Systems Testing and Testable Design and Computer Architecture (**2005-2006**).
12. **Coordinator of Two-day National Workshop on “Heterogeneous Computing: Platforms, Tools and Applications”**, jointly organized by Department of Computer Science and Engineering and Department of Electronics and Communication Engineering, during 31 August 2012 – 1 September 2012

11. Refresher Courses/ Workshops/Conferences Attended:

1. Attended Two-Day Master Trainer/Evaluator on Outcome-based Education organized by NBA, New Delhi at Suresh Gyan Vihar University, Jaipur. (18-19 Feb 2013)
2. Participated in Workshop on Outcome based Accreditation Process, at NMIMS, Shirpur campus, Maharashtra. (15-17 March 2013).
3. Participated in 10-day FDP program on Foundation Skills in IT (FSIT) at JNTUH, Hyderabad.(19 – 26 August 2013)
4. Participated in Two-Day TEQIP Conclave at IIIT, Hyderabad. (30-31 August 2013)
5. Six-Day Training Program on Pedagogical training at ESCII, Hyderabad. (20-25 Jan'2014)
6. Two-Weeks Faculty Development Program in Entrepreneurship sponsored by DST, NSTEDB at EDC, UCE, OU (30-12-2013 to 10-01-2014)
7. Chaired as Session at National Conference on Computer Networks and Information Security, Vasavi College of Engineering, Hyderabad. (4th March 2014).
8. Participated in 5-day Training program on Management Capacity Enhancement program at IIM-Kozhikode during 5-10 December 2016.

12. Invited Lectures delivered at Workshops/Seminars:

1. Lecture on” Introduction to Computer Fundamentals and Organization” at Refresher Course on IT Application organized by Moulana Azad Urdu University, Hyderabad on 6-05-2010.
2. Lecture on” Introduction to Computers”, at Faculty Development Program organized

by UGC- Academic Staff College, OU on 25-08-2010.

3. Lecture on “C++ AMP FOR C++ Developers”, at National Symposium on Heterogeneous Computing: tools and Platforms organized by AMD and Dept of ECE on 01-09-2012.
4. Lecture on “FPGA-based Digital Design” at One-Week Faculty Development program on Recent Advances in VLSI organized by Dept of ECE, UCE(A), OU, Hyderabad on 10-06-2014.
5. Lecture on “Introduction to Computing Technologies” at Two Week STTP on Emerging Trends in Mobile and Cloud Computing at CBIT, Hyderabad on 29-12-2014.
6. Lecture on “Parallel Architectures: tools and techniques using C++ AMP”, at A Three-Day Workshop On Parallel and Distributed Computing organized by MVSR Engg College, Hyderabad on 21-01-2016.
7. Lecture on “Introduction to Parallel Architectures”, organized by Bharat Institutions on 20-03-2015.
8. Lecture on “Parallel Computer Architectures” organized by Loyola Academy Degree And P.G College, Hyderabad on 11-09-2015.
9. Lecture on “ Parallel Computing : Research Issues and Case Study”, at Three-Day National Workshop On Research Methodologies organized by Stanley College of Engineering and Technology, Hyderabad. on 24-02-2016.
10. Delivered a Lecture on “Pyrhion Programming Basics”, at 5-day Workshop on Python Programming, organized by Dept of Mathematics, Osmania University, Hyderabad.