

C.P. Ravikumar

Objective

Professional Activities

Distinguished Lecture Program, IEEE Education Society

- Served as Program Co-Chair in VLSI Design Conference (2001 and 2002). See <http://vlsi.ccrl.nj.nec.com>
- Member, Steering Committee, VLSI Design Conference (2002-current)
- Secretary of IEEE Circuits and Systems Society, Bangalore Chapter (since 2004)
- Secretary of VLSI Society of India (2003-current)
- Founding General Chair of VLSI Design & Test Workshops since their inception in 1998. See <http://vlsi-india.net>
- Program Vice-Chair of International Conference on High-Performance Computing (1998). See <http://www.hipc.org>
- Workshop Chair, HiPC (2002, 2003). See <http://www.hipc.org/hipc2003/workshops.html>
- Served on the program committee of over 10 different national and international conferences. Details available from <http://cpravikumar.tripod.com>
- Served as Indian Editor of *the International Journal of VLSI Design* (Ablex Publishers) since 1991.
- On the editorial board of Journal of Electronic Testing (Since 2001) and Computer Science & Informatics (Since 1992).
- On the editorial board of Journal of Low Power Electronics (Since 2007)
- Serve on the Board of Studies of the VTU (Visweswaraya Technological University) and several colleges affiliated to VTU. Also serve on the Board of Governors of Chitkara University, Uttarakhand.
- Have delivered a large number of keynote talks and invited lectures in colleges across India. Details are in <http://cpravikumar.tripod.com>
- Review papers for a large number of conferences and journals (including IEEE Transactions on Computers, IEEE Transactions on VLSI/CAD, IEEE Transactions on VLSI)
- Best Paper Award (VLSI Design Conference, Bangalore, 2001)
- Best Student Paper Award (VLSI Design Conference, Chennai, 1998)
- Author of the book "Parallel Methods for VLSI Layout" (Ablex Publishers,

USA, 1995) and 7 books in the series “Progress in VLSI Design and Test” (Elite Publishers, New Delhi)

Experience

2008 – Present

- Serving as the Technical Director of TI India University Program. Established the “UniTI” Newsletter as a quarterly publication which reaches about 1500 professors. The newsletter educates the professors on TI products and on recent technological advances. I am the editor of the newsletter.
- Continue to play the role of Dean of the TI India Technical University. Continue to innovate and provide value addition for PragaTI – introduced mentorship program, introduced e-learning, and collaborations with professional societies.
- Accepted to be an Adjunct Faculty at the Department of Electrical Engineering in IIT Madras. Teaching, Organizing student technical events, and Supervising students as part of this responsibility

2006- 2007

- Founded the TI India Technical University (codenamed “PragaTI”, which means Progress in Sanskrit) to cater to the needs of continuous education of TI India employees. Established the technical structure of the University and all the associated processes. PragaTI caters to over 1500 employees as well as subcontractors and has a repertoire of over 50 courses in several competencies. I also teach regularly in the University.

2003-2005

Texas Instruments, India Bangalore

- Program manager for DFT aspect in the “Ohio” chip (Broadband application) using the IDFT flow developed under my leadership
- Played the role of VLSI Test expert and an interface between Texas Instruments and Synopsys to drive the requirements of TI into Synopsys tools. Worked closely with TI engineers and Synopsys developers on test compression solutions.

2001-2003

Texas Instruments India Bangalore

Senior Technologist (VLSI Test)

- Member, Group Technical Services
- Part of the ASIC Division
- Lead a team of software engineers in developing VLSI Test flow for TI world-wide use (the flow is called Integrated DFT, or IDFT)
- Responsible for software specification, design, development, testing, and deployment
- Coordinate the technical activities in ASIC Division (Product Awareness Training, Fortnightly seminars)

2000–2001

Controlnet (India) Pvt Ltd

Goa

Vice President Training and R&D (On leave from IIT Delhi)

- Coordinate internal training programs in all areas pertaining to VLSI and associated software (Chip Synthesis, Verilog, Perl Scripting, UNIX Shell Scripting, CMOS VLSI)
- Lead a team of 5 engineers on an IP development project related to *Infiniband I/O Protocol*
- Founded and coordinated the annual *Controlnet Workshop on Networking and VLSI*
- Coordinated the preparation of the “*RTL to GDS*” Design Process Document
- Started Study Groups on Wireless and DSM Design Techniques

- Started weekly seminar and delivered over 10 seminars since December 2000 in various aspects of VLSI Design (Crosstalk Estimation, Power Planning in ASICs, Static Timing Analysis, Design For Testability, Built-in Self-Test, Automatic Test Pattern Generation, Network Switching, Mobile Communications, GSM, MIPS Microprocessor, Low-power Embedded Software)

1991–Current Indian Institute of Technology Delhi

Professor

- *Teaching:* Taught 15 different courses and labs pertaining to Computer Technology and VLSI Design. Developed new courses in the areas of “CAD for VLSI,” “Distributed Computing,” “Memory Design & Test.” Developed a Microcomputer Lab with funding from Motorola. Key player in the industry-sponsored M.Tech program in VLSI: Design, Tools, and Technology. Was adjudged best teacher (1998).
- *Research:* Supervised 4 Ph.D. theses, 1 MS thesis, 55 M.Tech theses, and 27 B.Tech theses. Published two books and over 175 research papers in distinguished international journals and conferences. Coordinated a number of Sponsored Research and Consultancy programs with funding from Motorola (USA), Defense Research and Development Organization, Department of Science and Technology, Ministry of Human Resources Development. Coordinated training programs for many Indian industries.

1985–1985 Processors Systems India Bangalore, India

Systems Software Engineer

- Worked on UNIX Systems Programming in C language. Developed an assembler and a PLI for their in-house Hyperbase Database Software.

1983–1985 Infosys Consultants Pvt Ltd. Bangalore, India

Software Engineer

- Worked software development projects in AOS/VS Cobol at Mountain Home, Arkansas (USA and Clearwater, Florida (USA). Also worked on assembly-language software development for a store-and-forward message system project at Bangalore.

Education

1987–1991 University of Southern California Los Angeles, CA

- Ph.D., Computer Engineering, Department of EE-Systems
- Thesis entitled “Parallel Algorithms for Automating Physical Design of VLSI Circuits.”
- Worked as a teaching assistant and a research assistant for 4 years. Taught the VLSI Design course twice.

1985-1987 Indian Institute of Science Bangalore, India

- Graduated with M.E. (Computer Science) *with highest CGPA* for the class
- M.E. Thesis entitled “Hardware Accelerators for VLSI Layout”

1978-1983 U.V.C.E. (Bangalore University) Bangalore, India

- Graduated with a B.E. degree in Electronics. Winner of Gold Medal for highest marks for the University. Obtained first rank in 9 out of 10 semesters.

Interests

Reading and Writing. Published 1 translation of short stories (Kannada), 1 book of poems (Kannada), 2 books on Computer Education (Kannada).

Website

More detailed information about me is available at my personal home page <http://cpravikumar.tripod.com>