

# Roopa R. Kulkarni

## Summary

- Currently working as an **Asst. Prof. in Gogte Institute of Technology, Belgaum** with a total experience of 12 and a half years associated with different institutions namely: K.L.E. College of Engg. and Tech., Belgaum, Manipal Institute of Technology, Manipal, Maratha Mandal's Engg. College.
- Presently pursuing Ph.D. in the field of low power VLSI.
- One among the first ten rank holders in **M.Tech (VLSI Design and Embedded Systems)**.
- Publication of papers at national and international conference, of which one titled "**Design and Simulation of Multiple Input Floating Gate Op-amps**", got the best paper award.
- As a one of the **subject expert** for **VTU edusat Program 10 and 11**, for the subject **Microcontrollers** (4<sup>th</sup> Sem Electrical Science) and **Fundamentals of CMOS VLSI** (5<sup>th</sup> Sem – will be delivering).
- Awarded with **Dale Carnegie – High Impact Training Skills** certificate.
- Actively involved in guiding and training students at all levels (B.E. and M.Tech) in the area of VLSI tools, projects and paper presentation.
- One of the **Undergraduate projects** was selected by **KSCST** and won the Best **Project Award at 33<sup>rd</sup> KSCST project exhibition**.
- Actively involved in motivating and training the students in taking up **industry design contests**.
- Basic computer training conducted for non IT professionals like Lawyers and Nursing students.
- Actively involved in inter departmental activities, setting up of laboratories with latest technologies (Cadence laboratory in E&C) and drive in maintaining the departmental library and association activities at K.L.E. College of Engg.

## Education

<b>Doctoral</b>	<b>Pursuing Ph.D. in the field of Low Power VLSI Systems</b>
<b>Post Graduation</b>	<b>M.Tech. (VLSI Design and Embedded Systems)</b> (2 yrs: 2003-2005) with 84.07 (all semester), V.T.U., P.G. Centre, Belgaum.
<b>Graduation</b>	<b>Bachelor Of Engineering</b> (Electronics and communications) (4 Yrs: 1995- 1999) (with 72.1 final semester) Gogte Institute Of Technology Belgaum, Karnataka, India.

## Work Experience

August 2007 till date	Asst. Prof.	KLS Gogte Institute of Technology, Belgaum
April 2001 to August 2007	Lecturer	K.L.E. College of Engg. and Tech., Belgaum
October 2000 to April 2001	Lecturer	Manipal Institute of Technology, Manipal
April 2000 to October 2000	Lecturer	Maratha Mandal's Engg. College, Belgaum

## Subjects Handled

Microcontrollers, Advanced Microprocessors and Microcontrollers, Embedded Systems, Real Time Embedded Systems, Fundamentals of CMOS VLSI(UG & PG), Microprocessors, Network Analysis, Electronic Circuits, Logic Design, UNIX and UNIX System Programming.

## Skill-Set

<b>Programming languages</b>	C and UNIX System Programming
<b>Operating Systems</b>	Unix, Win95/98/NT/2000, Windows NT 4.0
<b>Databases</b>	Oracle 9i
<b>Design tools for VLSI</b>	Tools of Mentor Graphics, Winspice, LASI, and Verilog HDL
<b>Assembly language programming</b>	8085,8086,8051-microcontroller(assembly and C)

## Project Details

### 1.

#### Post Graduation:

<b>Title</b>	<b>"Design and Simulation of nth Order Sigma-Delta ADC in CMOS using Floating Gate for Bio-Informatics Data Logger"</b>
<b>Technology &amp;</b>	<ul style="list-style-type: none"> <li>Winspice and LASI</li> </ul>

<b>Environment</b>	
<b>Skills Gained</b>	<ul style="list-style-type: none"> <li>• Developed different blocks of Sigma-Delta ADC</li> <li>• Gained knowledge on back end tools</li> <li>• Introduction to physical layout problems and handling them</li> </ul>
<b>2.</b>	
<b>Graduation :</b>	
<b>Title</b>	<b>Canal Automation</b>
<b>Technology &amp; Environment</b>	<ul style="list-style-type: none"> <li>• C</li> </ul>
<b>Role &amp; Responsibilities</b>	<ul style="list-style-type: none"> <li>• Design of sensors.</li> <li>• Development and Implementation</li> <li>• Preparation of Design documents.</li> </ul>
<b>Skills Gained</b>	<ul style="list-style-type: none"> <li>• Learned a new concept <b>Fuzzy Logic</b></li> <li>• Learned Sensor interface</li> <li>• Project Documentation.</li> </ul>
<b>Papers Published</b>	
<ul style="list-style-type: none"> <li>• A paper titled "<b>Design and Simulation of Multiple Input Floating Gate Opamp</b>", at Second National Conference on "<b>Emerging Trends in VLSI Design</b>", conducted by <b>PSG College of Technology</b>, Coimbatore and bagged <b>best paper award</b>.</li> <li>• A paper titled "<b>Sigma-Delta ADC for Bio-Informatics Data Logger</b>", at National Conference on Bioinformatics Computing (NCBC'05) conducted by Thapar Institute of Engineering and Technology, Patiala.</li> <li>• A Paper titled "<b>Design and Implementation of Low-Drop out Voltage regulator</b>" at National Conference on VLSI Design and Embedded Systems, conducted by Adhiyaman College of Engg., Hosur.</li> <li>• A Paper titled "<b>Modelling of variable Threshold Floating Gate MOSFET for Analog Signal Processing</b>", at International Conference on RF and Signal Processing System (RSPS-2008), K.L. College of Engg.,Guntur, A.P.</li> <li>• A paper titled " Low Power Strategies for Network Processors: A Survey", at <b>5th IEEE International Conference on "Advanced Computing and Communication Technologies"</b>, APIIT SD India, November 2011.</li> </ul>	

## Workshops/conferences Attended

- 5-days Faculty Development Training Program "**mission10x**", conducted by Wipro, India.
- 6-days training on "**Cadence VLSI Tools (Virtuso, IUS, Encounter, SOC)**", conducted by the Cadence Design Systems, B'lore.
- 4-days training on "**Cadence VLSI Tools**", conducted by the Cadence Design Systems, VTU, Belgaum.
- Second National conference on "**Emerging Trends in VLSI Design**", conducted by PSG College of Technology, Coimbatore.
- 2-days workshop on "**Embedded System Software**", conducted by IIT, Bombay.
- 2-days workshop on "**Embedded Systems and Energy Management**", conducted by KLECET, Belgaum.
- 4- days workshop on "**Microcontroller, Embedded System Design and its Industrial Applications**", conducted at K.L.E. College of Engg. and Tech., Belgaum.
- Workshop on "**Latest Trends in VLSI Design & Embedded Systems**", conducted by V.T.U., Belgaum.
- 3-days workshop on "**Self and Career Development Programme**", conducted by V.T.U., Belgaum

## Other Activities

- Conducted an e-based Faculty Development Program "**AARAMBHA**" of Wipro for the fresh faculty.
- Conducted a 3 – day Faculty development training program "**Reflections**", as a sequel to Mission10x program to junior faculty at GIT.
- Worked as a Departmental Association Secretary, Dept. Of CSE, KLECET during which encouraged students to conduct and participate various co-cirricular and extra-cirricular activities.
- Organised a National Conference on "Emerging Trends in IT – iflip '07" during May 2007.

- In the organizing and technical committees in various state and national level paper presentation, symposiums and project demos.
- Conducted basic computer course for the non-IT professionals: Lawyers of InfoTech law and Nursing (B. Sc.)
- Involved in NBA and ISO activities.
- Worked as a co-ordinator for the theory valuation.
- As a judge at "Avalanche – paper presentation" , GIT, Belgaum
- As a judge at project demo conducted by KLE's BCA college, Belgaum.

***The above stated information is true to the best of my knowledge and belief.***

Yours sincerely

Place: Belgaum.

Date: 10-09-2012

(Roopa R. kulkarni)