GURURAJA S. R.

'Aprameya', #26, 3rd Main Road, N R Colony ○ Bangalore - 560019, Karnataka, India ○ Ph: 91-9620879871 ○ gururaja@ieee.org

OBJECTIVE

To contribute to the fields of mixed signal, RF and embedded system design through relevant employment

EDUCATION

Master of Science, Electrical Engineering, GPA: 3.4/4.0 — December, 2007
University of Southern California — Los Angeles, CA

Bachelor of Engineering, Electronics and Communication, Result: 81.2% — July, 2006
PES Institute of Technology/Vishweshwaraiah Technological University — Karnataka, India

TECHNICAL SKILLS

Cadence Virtuoso, LTSpice, ExpressPCB, Magic, IRSIM, MATLAB, MPLAB IDE, C language, Embedded Systems Design

RESEARCH EXPERIENCE

Indian Institute of Science, Bangalore — Aug, '10 - Feb, '13

Studied towards a PhD before voluntarily opting out due to personal reasons at Indian Institute of Science, Bangalore

- Completed two courses – Digital VLSI Circuits and Analog VLSI Circuits
- Implemented a 60 GHz Voltage Controlled Oscillator from a paper and a Phase Frequency Detector in Cadence Virtuoso
- Designed a 4 MHz second order loop filter and a system level model of a 30 GHz Phase Locked Loop with second harmonic extraction from Voltage Controlled Oscillator
- Implemented a system level model of a 30 GHz Phase Locked Loop in MATLAB/Simulink

University of Southern California, CA, USA — Oct – Nov 2007

Directed Research under Dr. Anthony F. J. Levi: Developed an ultra-small USB data acquisition module, a slight variation of which is currently being used in a course at University of Southern California – EE337: Engineering Micro and Nano-Systems taught by Dr. Levi

WORK EXPERIENCE

TM Tech, CA, USA — Jan, '08 - Nov, '09

- Design, development, and implementation of an ultra-small, high-performance RF spectrum analyzer for interfacing to a mobile PC platform. Physical implementation included system design, design of PCB, electronic testing of components and integrated system, development of firmware, and user API
- Design, implementation and testing of subsystems for mixed signal and RF applications, including high sensitivity RF detectors, RF receivers, true-time delay beam formers, radar, and ultra-wideband radar subsystems

ACADEMIC PROJECTS

University of Southern California, Los Angeles, CA, USA

- Implementation of a compiled driven deductive fault simulator; Individual project — Dec, 2007
- MMIC (Monolithic Microwave Integrated Circuit) voltage controlled oscillator design; Team project — Apr, 2007
- Design of a switched capacitor band-pass filter; Team project — Apr, 2007
- Projects in RF Design; Individual projects — Jan - May 2007
  - Transimpedance amplifier
  - Voltage controlled oscillator (VCO)
  - Dual band quadrature VCO
  - Low Noise Amplifier (LNA)
  - Current shared LNA and Mixer
  - Power amplifier
- Implementation of active band-pass filter based on Delyiannis-Friend topology; Team project — Dec, 2006

Indian Institute of Science (IISc), Bangalore, India

- Design of an integrated micro system consisting of a MEMS vibration sensor; Team project — Mar - Jun 2006

Toyota Kirloskar Motor Pvt. Ltd., Bangalore, India

- Design and fabrication of a closed loop control system for process automation – monitoring the assembly of various components of a vehicle shock absorber; Team project — Mar - Jun 2006

EXTRA-CURRICULAR ACTIVITIES

Sports: Represented school and college in Table Tennis and Swimming competitions and won prizes
Art: Guitar; Distinction awardee in drawing grade exam in 1998; Represented school in drama and won prizes
Languages known: English, Kannada, Hindi, Tamil, Sanskrit

AFFILIATIONS AND ACHIEVEMENTS

- Member of IEEE (Institute of Electrical and Electronics Engineers)
- Obtained awards from PES Institute of Technology for securing distinction in all university examinations and have been among the top ten students in the department
- Obtained merit certificate for excellence in studies under National Scholarship Scheme from Education Department, Government of Karnataka, in 2000-2001