RAGHUNANDAN CHAKRAVARTHY

Design Engineer

✉ cnraghs@gmail.com   ♀ 183A Nieder-Ramstädter Strasse, WG 23, Darmstadt 64285, Germany
in linkedin.com/in/rchakravarthy/   ☎ +49 176 891294 57   ⌂ Indian   🗓 15 August 1991

MASTER THESIS

Design and Implementation of a Radiation hard High Current Transconductance Amplifier
TU Darmstadt

🗓 June 2018 – Ongoing   ♀ Darmstadt, Germany

- OTA was used in series with an Op amp and an emitter follower
- Programability to the circuit was provided through the bias current of the OTA
- XFAB 180nm SOI technology was used to make the design radiation hard
- Cadence Virtuoso tool was used to design and simulate the circuits

WORK EXPERIENCE

Internship (6 months)
Robert Bosch GmbH (Automotive Electronics)

🗓 Dec 2017 – May 2018   ♀ Reutlingen, Germany

- Created program/software components in LabVIEW
- Designed a dedicated test and measurement environment for ASIC packages
- Designed suitable laboratory hardware (circuit boards, layout, structure)
- Performed the evaluation of results for various stress tests

Java Developer/Senior Systems Engineer (3 years)
Apple Inc./Infosys Ltd.

🗓 Oct 2013 – Sept 2016   ♀ Bangalore, India

- Developed services and tools related to the product line of the Apple Store
- Performed the migration of data from Oracle to Cassandra using ETL process
- Transitioned from Waterfall model to Agile model

ACADEMIC PROJECTS

Design & implementation of a 3-bit resistor string DAC
TU Darmstadt   🗓 May 2017 – July 2017

- Designed am op-amp, a switch multiplexer and a digital control logic block
- Cadence tool was used to create schematics, layouts and simulate the design
- Floor planning with common centroid, interdigitated layouts were implemented to use area efficiently

Design & implementation of an ARM pipe-lined processor
TU Darmstadt   🗓 July 2017 – August 2017

- Designed a 16-bit processor with 4 stages of pipeline
- Implementation was done Verilog using Modelsim
- Performed gate level synthesis of the design using Synopsys and Vivado

GSM based SMS driven toolkit for notice boards
Bachelor Thesis   🗓 Feb 2013 – June 2013

- LED notice board was programmed with scrolling functionality
- Displays the message as soon as an SMS is received by the GSM modem
- Microcontroller Atmega32 was programmed using embedded C

EDUCATION

M.S. in Information and Communication Engineering*
Technische Universität Darmstadt, (CGPA:2.6)

🗓 Oct 2016 – Ongoing   ♀ Darmstadt, Germany

B.E. in Electronics and Communication Engineering
Visvesvaraya Technological University, (CGPA:2.3)

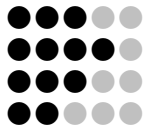🗓 Sept 2009 – June 2013   ♀ Mysore, India

SKILLS

Programming:
C, C++
Java
Verilog, VHDL
MATLAB

Software: Cadence | Modelsim | LabVIEW | Eclipse | Latex | MS Office

Atlassian Tools: GIT | JIRA | Bamboo | Confluence | Fisheye | SVN

OS: Microsoft Windows XP, 7, 10 | Mac OS 10.x | Linux

OTHER COURSES

- Infosys Certified Java Programmer
- MyGen IT certified C++ Programmer
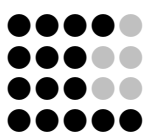- Cisco Certified Network Associate trainee

LANGUAGES

English
German
Hindi
Kannada (Native)

HOBBIES

Photography | Numismatics | Hiking | Chess | Cricket | Football