SURYAKANTA MANGARAJ

suryaraj.me • surya.socialnetworking@gmail.com • Bhubaneswar, India

To excel in a challenging assignment in Electronics field; by utilising my skills, education and work experience.

EXPERIENCE

Application Engineer, GSAS Microsystems Pvt. Ltd.   **Sep 2019 – Till Date**

- Develop and execute test plans and procedures for the product
- Work with tool and library vendors to develop solutions for designers' P&R design challenges
- Create detailed test plans: signal integrity, battery, power, and sensors, execute test plans
- Execute EE development of consumer products
- Establish project design standards and conventions while facilitating improvements to quality
- Effectively work independently without direction from mentors of functional management

R and D Engineer, Electronics Centre of Excellence   **May 2018 – Aug 2019**

Electronic Center of Excellence(eCOE) is a rapidly growing platform that has a laser-sharp focus to nurture the Electronics Industry ecosystem with a combined effort towards Training, Research, and Incubation. eCOE Research is an endeavor to foster advance electronic research and lead them towards state-of-the-art productization. Most of the ongoing research are aimed towards building technology solutions for solving few acute problems of the society in general. Specific areas include IOT Smart sensing at edge, Bio medical instrumentation and Radio frequency chips.

- Work with SoC development team and platform team for trouble shooting of hardware and software issues
- Work with FPGA design team to make the prototype of the system and testing purpose
- Component and System verification of ICs application processor with full responsibility for functional quality of SoC
- Create detailed test plans: signal integrity, battery, power, and sensors, execute test plans
- Execution and Automation of Test Cases to increase Test Coverage under different external conditions
- System level failure analysis to root cause the failures
- Good team-work spirits

SKILL SUMMARY

- Hardware Languages: VHDL, Verilog, Verilog-A
- Design Tool: Cadence OrCAD, Xilinx ISE, Xilinx Vivado
- Scripting: Python, Linux/Unix shell scripting, Tcl/Tk scripting
- Programming Languages: C, C++
- Testing and Measurement Tools: Oscilloscope, Logic Analyzer, Function Generator, Power Supply, Spectrum Analyser, Multi-meter, LCR meter etc.
- Other Tools: MATLAB, NI Labview, Keysight BenchVue

PROJECTS

SoC data acquisition system board for smart water quality monitoring   **Jan 2019 – Jul 2019**

Design of a DAQ system board with testability

- Involved in to create the architecture and conceptual level block diagram with DFT technique to make the board testability friendly
- Create a schematic design using OrCAD schematic capture and TINA Spice and theoretical simulation of the board
- Define testing points of the board
- Calculate and define the input and output signal and power budget as per customer specs
- Responsible for different part used in design and prepared BOM of the design

EDUCATION

National Institute of Science and Technology, B.Tech. Electronics and Communication   **2014 – 2018**

- GPA 8.09

AWARDS AND ACHIEVEMENTS

- Finalists of the Cadence Design Contest 2018 under UG category for B-tech Project "Design of Low Power High PSRR LDO Regulator with Smart Power Save Operation"
- Published a paper titled "Design of two stage classical model Op-Amp for LDO applications" in "8th IEEE MINI-COLLOQUIUM" by IEEE ED-NIST Student Chapter
- Certified as the VLSI Design Engineer Framework Level-5 by ESSCI (NSDC), India
- Qualified to qualifying round of INDIA INNOVATION CHALLENGE design contest 2016 organized by DST and Texas Instruments Inc
- Participated in WEBENCH design contest 2016 organized by Texas Instruments Inc

REFERENCES

Available on request