

KOMMALA NAGASAI SRINIVAS

TRAINEE IN PHYSICAL
DESIGN

CAREER OBJECTIVE

Looking for challenging and diversified workplace where I can dedicate my work of theoretical knowledge and practically implementing those skills in a productive way, which would enable me to grow while fulfilling organization goals.

PROFESSIONAL TRAINING

MAVEN SILICON

APRIL 2022- Present

Physical Design

- Learnt synthesizing the netlist, implementing Physical design flow and physical verification using EDA & Synopsys tools.

EDUCATION

- **Master's in Communication Engineering & Signal Processing** from G.V.P college of Engineering (A), Visakhapatnam with 69.40%. (2016-2019)
- **Bachelor's in Electronics and Communication Engineering** from ANITS College of engineering Visakhapatnam with 65.60%. (2012-2016)
- **Class XII** from Sri Chaitanya Junior College, Srikakulam with 92.30%. (2010-2012)
- **Class X** from Gayatri Model High School Srikakulam with 81.83%. (2009-2010)

✉ nagasai.kommala@gmail.com

☎ +91 7306629777

in www.linkedin.com/in/kommala-nagasai-srinivas

SKILL SET

VLSI DOMAIN SKILLS:

- **HDL** : Verilog
- **EDA Tool** : Mentor Graphics - Questasim , Xilinx - ISE, Xilinx – Vivado, APRISA and calibre.
- **SYNOPSYS Tool**: Fusion Compiler, Prime Time
- **Domain** : Physical Design flow including netlist extraction using Oasys tool. Floor plan, Placement, Clock tree synthesis, Routing , STA, Signoff using APRISA & Fusion Compiler tool. Physical Verification (PERC, DRC and LVS) using calibre tool.
- **Programming Languages** : C Language (based on the trainee's expertise)
- **Operating Systems** : Working knowledge on Windows and Linux
- **Version Control** : GIT
- **Scripting Languages** : TCL
- **Core Skills** : RTL Coding using Synthesizable constructs of Verilog, FSM based design & Simulation, CMOS Fundamentals, Physical design flow and Physical Verification (PERC, DRC & LVS)

COLLEGE SKILLS

- **MATLAB** - Digital Signal Processing
- **MASM or TASM** - Assembly Language Programming (8085 or 8086)
- **HIGH FREQUENCY STRUCTURE SIMULATOR** - Wireless communication.

ACHIEVEMENTS

- Stood as runners in the intra-department cricket tournament conducted by Anits communication engineers' society (ACES) in the year 2016.

- Successfully completed ePROBE 2016 National Level Technical Fest as a coordinator of Hospitality & Accommodation organized by ECE department of ANITS.

WORKSHOPS

- Participated in "A three day Hand-on workshop on Design and Analysis of Antenna using HFSS" held at MVGR college of engineering Vizianagaram.
- Participated in a two day national workshop on MATLAB "NATIONAL LEVEL STUDENT TECHNICAL PAPER CONTEST & EXHIBITION" held at GMR institute of technology & sciences Srikakulam.

HOBBIES

- Listening Music
- Playing Cricket
- Working out in the gym

Subject Expertise:

Digital electronics, Analog electronic, Network analysis, Analog & Digital Communications, Signals & System, Signal Processing, Microcontrollers, Wireless communication.

VLSI DESIGN

Digital Electronics :

Combinational & Sequential circuits, FSM, Memories, CMOS implementation, Stick diagram.

STA :

STA Basics, Comparison with DTA, Timing Path and Constraints, Different types of clocks, Clock domain and Variations, Clock Distribution Networks, Fixing timing failure.

Verilog Programming:

Data types, Operators, Processes, BA & NBA, Delays in Verilog, begin - end & fork join blocks, looping & branching construct, System tasks & Functions, compiler directives, FSM coding, Synthesis issues, Races in simulation, pipelining RTL & TB Coding,

Physical Design :

Netlist Extraction using Oasys. Floor plan, Placement, Clock Tree Synthesis, Routing, STA, ECO and Sign off using Aprisa & Fusion compiler. Physical Verification (PERC, DRC, LVS) using Calibre.

Responsibilities for Design:

- Synthesizing the RTL code and generate the Gate Level netlist.
- Implementing floor plan, Placement, CTS, Routing, STA processes on the netlist
- Performed Timing Analysis and achieved timing closure.
- Performed DRC, PERC and LVS for Physical Verification
- Exporting the Design in GDS-II format.

STRENGTHS

- Critical thinking
- Team motivator
- Adaptability to work in all kinds of situations

CERTIFICATIONS

• VSD - Physical Design Flow

Credential:

<https://www.udemy.com/certificate/UC-29aee1c9-0968-4faa-9969-d41761b5196c/>

• VSD - Static Timing Analysis

Credential:

<https://www.udemy.com/certificate/UC-53cfb164-37d0-4762-941e-48e325bd5753/>

• VSD - Timing ECO

Credential:

<https://www.udemy.com/certificate/UC-259972b9-8ffd-40d7-96af-1a34880f1374/>

• VSD - TCL programming

Credential:

<https://www.udemy.com/certificate/UC-b3f84151-115a-4276-a0f4-70b464f2a24c/>

PROJECTS

1.RISCV-32bit – RTL design and Implementing Physical Design Flow

HDL: Verilog

EDA Tools: Model sim, Oasys, Aprisa & calibre

Description: RISCV is an open-source and reduced instruction set computing architecture used in microcontrollers and embedded systems that execute a large number of simple instructions to complete a task.

Responsibilities: Extracted the synthesized netlist from OASYS tool and performed the physical design flow using APRISA.

M.TECH PROJECT

2.Design and analysis of compact antenna using MIMO for wireless applications

Tools: HFSS

Description: Designed a compact MIMO antenna operating over a frequency range of 2.4GHz-5GHz with FR-4 epoxy as substrate obtained high gain with low mutual coupling by placing "SWASTIK" shaped slot between two dumbell patches.

Responsibilities: Designed and simulated MIMO antenna using HFSS.

DECLARATION:

I hereby declare that all the information provided in this resume is true.

DATE: 10-04-2023

PLACE: BANGALORE

KOMMALA NAGASAI SRINIVAS