

Centre of Excellence in VLSI

## SARANYA P M

## **DFT Engineer**

A highly motivated and hardworking individual with extensive knowledge of the DFT concepts. A quick learner and team player committed to staying current with emerging trends and Technologies in VLSI design. Detail oriented with strong organizational, problemsolving, and communication skills, and a willingness to take on new responsibilities to contribute to the success of the company. Charismatic and dependable Assistant Professor with 3.6 years' experience in electronics and communication engineering.

## **CONTACT**

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LinkedIn:
https://www.linkedin.com/in/s
aranyapm

# PROFESSIONAL SKILLS

- Self-confidence and interactive person with positive attitude
- Time management skills.
- Good leadership skills.
- Good communication and presentation skills.
- Teamwork.
- Quickly adaptable to any new situation and environment.

## **PROFESSIONAL TRAINING**

#### **ADVANCED VLSI DESIGN AND DFT**

Maven Silicon VLSI Design and Training Center, Bangalore

March 2023- Till date

## **VLSI DOMAIN SKILLS**

- HDL: Verilog.
- EDA Tool: Mentor Graphics-ModelSim, Synopsys-DC Compiler.
- Domain: ASIC/FPGA front-end Design and DFT.
- Operating System: Windows and Linux.
- Core Skills: RTL Coding using Synthesizable constructs of Verilog, FSM based design, Simulation, CMOS Fundamentals, Code Coverage, Synthesis, Static Timing Analysis.

# **ACADEMIC PROJECTS**

- M.E PROJECT:

   Construction of Compact
   High –Throughput S–Boxes
   and Modified Mixcolumn
   Implementation for AES.
- B.E PROJECT: GSM Based Voting Machine.

## **CERTIFICATES**

- Presented paper on Construction Of Compact High-Throughput S-Boxes And Modified Mixcolumn Implementation For AES in SNS College Of Engineering, Coimbatore (National Conference)
- Participation in Faculty
   Development Program on
   Teaching Excellence and
   Methodology (MEA Engg
   College)

## **DFT SKILLS**

#### **Experience with multiple aspects of the following**

- ATPG, Test Coverage
- JTAG, BSDL, IJTAG
- Memory and Logic BIST
- Synthesis scan stitching
- Memory BIST implementation
- Scan/Jtag/boundary-scan insertion and ATPG pattern generation
- Test coverage and fault coverage analysis
- Knowledge/experience with ATPG / DFT tools: Tessent, System Verilog, RTL

## PROJECT UNDERTAKEN

#### Router 1x3 – RTL design and Verification

- HDL: Verilog.
- EDA Tools: Mentor Graphics ModelSim, Synopsys-DC Compiler.
- Description: The router accepts data packets on a single 8-bit port and routes them to one of the three output channels, channel0, channel1 and channel2.

#### Responsibilities

- Architected the block level structure for the design.
- Implemented RTL using Verilog HDL.

#### **DFT Insertion on RISC-V Core**

- EDA Tools: Mentor Graphics -Tessent.
- Description: Insertion of Boundary scan, Scanchain, EDT IP core on this 32bit processor design and implement the ATPG pattern generation using stuck-at-fault model, and the fault coverage is obtained and improved.

## **LANGUAGE**

- English
- Malayalam
- Hindi

## **INTEREST**

- · Singing and dancing
- Cooking
- Creative Designing
- Gardening
- Travelling

## **EXPERIENCE**

### 2013 APRIL - ASSISTANT PROFESSOR

2016 DEC

MEA Engineering College Perinthalmanna

- Handled Electronics and Communication Subjects.
- Supports students in creating and presenting Projects & Seminars.

2013 MARCH - LECTURER 2013 APRIL IHPD Pari

IHRD Perinthalmanna

• Handled Electronics related Subjects.

## **EDUCATION**

#### **ME - ANNA UNIVERSITY OF TECHNOLOGY**

2011 – 2013 VLSI Design CGPA–8.09

#### **BE - ANNA UNIVERSITY OF TECHNOLOGY**

2007-2011 Electronics and Communication CGPA-8.45

#### **HSE - KERALA STATE BOARD**

2005-2007 Higher secondary Percentage-72 %

#### **SSLC - KERALA STATE BOARD**

2005–2007 High school Percentage – 84 %

## **DECLARATION**

I hereby declare that the information given above is true to the best of my knowledge and belief & ready to bear any challenge.

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Place:

Saranya P M