Archana Kumari Email-ID: <u>archanadey9@gmail.com</u> Contact No.:+91-8935879863

Profile Summary:

- Basic knowledge of CMOS structure, working and circuits.
- Basic understanding of Digital Electronics.
- Delay Concepts (Net Delay, Cell Delay, Wire load model).
- Basic Understanding of Standard Cell Layout Design.
- Basic Knowledge of STA (Static Timing Analysis), Setup and Hold Time.
- Good in Basics of Programming in C.

• Have knowledge in Data Structures and Algorithms.

Education:	Percentage/CGPA	Year of Passing
• B.Tech (Silicon Institute 0	Of	
Technology)	8.88 (CGPA)	[2020 - pursuing]
(Electronics & Commun	nication)	
• XII (CBSE Board)	90.8%	[2015]
• X (CBSE Board)	9.8 (CGPA)	[2013]

Tools / Language:

• Simulation: TCAD

• **Programming:** C and Core Java

• **Productivity:** MS Office(Word/PowerPoint/Excel)

• Platform: Windows, UNIX/Linux

Trainings:

Title: Training on "Fundamental of VLSI Design" [5 days]

Organization: VLSI Expert Pvt. Ltd

Description: Basic of CMOS and Digital Design, Basic of VLSI Design,

Basic of Static Timing Analysis (STA) (Cell delay, Net delay

, Setup & Hold Time).

[May-June, 2018]

Title: Study Project on Server Based ALCATEL-LUCENT PBX

Organization: SAIL, Bokaro Steel City

Description: Detailed analysis of various media gateway (Plant

Exchange, Township Exchange Location, Admin.

Building Location), Call-server functionality, Voice mail

System.

Learn how to communicate with cross functional team.

Project: [August, 2019–till now, 2020]

Project Name: Performance Analysis of DG-MOSFET with respect of

different configuration for biosensor applications

Tools: TCAD **Team Size:** 5 members

Responsibility:

Learning of the tool and usage of it for schematic study and simulations of various DG-MOSFET. Literature survey about the proposed work by referring the relevant journals papers and gathering idea for the work.

Description:

- The project is based on biosensor application where we have considered different biomolecules such as protein, biotin with different permittivity in the nano-gap cavity of the oxide layer.
- •Their effects on various analog/RF applications for DG-MOSFET with stack and without stack technology.
- The effect of different high K material such as HfO₂ & Al₂O₃ is also studied in the stack region for different analog and RF performances.
- A comparison was also established between both the configurations to know their application area.

Learning:

- From this project, I understand the benefits of this proposed device in terms of reducing the SCEs and other advantages.
- The analysis by considering different biomolecules in the cavity gives an idea to use this device for biosensor application i.e., for medical application.

Certification: [3 weeks]

Course: Accenture-Digital Skills- Artificial Intelligence

Organization: Accenture
Issue date: May, 2020
Score: 93 percentile

Awards / achievements & Extracurricular activities:

- Awarded by the School for exemplary behavior, performance & attitude.
- Secured first prize in inter-school painting competition.
- Active participant in cultural and technical activities
- Member of "Hopes and Smiles", a philanthropic non-profitable organization

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