

KUMAR SOUBHAGYA BEHERA



28-05-2002



+91-9337501717

Jatni, Khordha, Odisha



soubhagyabehera879@gmail.com



Kumar Soubhagya Behera

CAREER OBJECTIVE

Hard working and passionate job seeker with strong organizational skills. Eager to secure entry level job as an Engineer and ready to help team and achieve company goal. I am enthusiastic, workaholic and eager to contribute to team and success through my skills, hard work and smart work. I am also motivated to learn, grow and excel in industry.

EDUCATION

Malaviya National Institute Of Technology, Jaipur
Master of Technology - VLSI Design
CGPA - 8.39
Aug 2024 – June 2026
Jaipur, India

Parala maharaja Engineering College, Berhampur
Bachelor Of Technology - Electronics and Telecommunication Engineering
CGPA - 8.58
Dec 2020 – May 2024
Berhampur, India

Kendriya Vidyalaya Khordha Road
Intermediate
Percentage - 86.67%
Apr 2019 – Mar 2020
khordha, India

Kendriya Vidyalaya Khordha Road
Matriculation
Percentage - 93.2%
Apr 2017 – Mar 2018
Khordha, India

PROJECT

Design and Implementation of Asynchronous AER Circuit Design for Neuromorphic Chips

Verilog HDL, Neuromorphic Computing, Asynchronous Digital Design, FPGA (Basys-3)

- Studied and implemented asynchronous Address Event Representation (AER) circuits for neuromorphic communication systems.
- Designed mask-based arbitration logic and dual-level AER architecture to reduce latency and hardware area.
- Simulated and verified the design using Verilog HDL, implemented on FPGA (Basys-3) to check the design performance.

FPGA-Based Image Processing System

Verilog HDL, Xilinx Vivado, FPGA (Basys-3), VGA Interface

- Designed and implemented an image processing system on FPGA using Verilog HDL.
- Developed RTL modules for image memory (BRAM), address generation, processing core, and VGA display controller.
- Implemented image enhancement techniques such as Brightness enhancement, grayscale conversion, image inversion, thresholding, red-channel extraction .
- Verified functionality through simulation and deployed the design on FPGA hardware for real-time image display.

FSM-Based Automatic Vending Machine System

Verilog HDL, Xilinx Vivado, Finite State Machine (FSM),

- Designed and implemented a automatic vending machine system using Verilog based on finite state machine (FSM) modeling.
- Accepted predefined coin denominations, developed logic for product dispensing, change reuse, and invalid input handling.
- Designed and simulated the system in Xilinx Vivado

Schematic and Layout Design of CMOS Digital Circuits

Cadence Virtuoso, 180nm Technology, CMOS Design

- Designed and simulated schematic and layout of basic digital building blocks using Cadence Virtuoso.
- Implemented CMOS circuits for Inverter, Flip-Flop (SR, D), and logic gates (AND, OR, NAND, NOR, XOR).
- Performed simulation, DRC (Design Rule Check), LVS (Layout vs. Schematic), and area estimation to validate physical design accuracy.

TRAININGS/INTERNSHIPS

BSNL-Regional Telecom Training Centre
6 weeks internship on "ADVANCE TELECOM"
Jun 2023 – Jul 2023
Bhubaneswar, India

Parala Maharaja Engineering College
1 month internship on "VLSI Design using EDA Tools"
Jan 2023 – Feb 2023
Berhampur, India

TECHNICAL SKILLS

- Topic-wise Skills :-Digital Electronics, Digital System Design, Analog layout design
- Software Skills :- Xilinx Vivado , Cadence Virtuoso , MATLAB
- Programming languages :- Verilog HDL, C++
- Other skills :- MS Word , MS Excel , Problem Solving ,Management skills , Good Communication, Leadership

ACHIEVEMENTS

- Got bronze medal in mathematics olympiad
- Positioned top 10 in regional science project exhibition

LANGUAGES

- English
- Hindi
- Odia

STRENGTH

- Hard working
- Responsible
- Good listener
- Quick learner