

SHRUTI SINGH

International Institute of Information Technology, Bangalore

☎ 8081244745

✉ shruti.singh@iiitb.ac.in

🌐 www.linkedin.com/in/shruti1764

🐙 <https://github.com/shruti488>

Education

International Institute Of Information Technology, bangalore

Aug 2024 - present

Master In Science by Research(VLSI)

Ashoka Institute of Technology and management,varanasi

Aug. 2017 – Aug 2021

Bachelor of Science in electronic and communication

8.73/10CGPA

Internship

Technex - IIT BHU

may 2020 – july 2020

Python programming

Uttar Pradesh

- Wrote and tested Python programs for different tasks.
- Worked with a team to develop simple applications or automation scripts

Projects

Hardware Implementation of POSITs and Their Application in FPGAs |

2024

- Implemented a POSIT adder/subtractor on FPGA hardware to evaluate its performance against IEEE-754 arithmetic..
- Designed a parameterized hardware module enabling dynamic precision adjustments, achieving insights into POSITs' efficiency for highperformance FPGA applications..

Schmitt-Trigger-based Low Power SRAM implemented using 45-nm CMOS Technology |

2024

- Designed and simulated a Schmitt-trigger-based 11T SRAM cell using 45-nm CMOS technology, achieving improved noise resilience, static noise margin (SNM), and energy efficiency compared to conventional 6T SRAM.

Solar Powered Water Trash Collector |

2021-201

- Led a team to develop a solar-powered water trash collector aimed at to collect many types of wastes from water bodies and also reduces the human interference.
- Achieved 4th position overall and secured the first place in a competitive environment

Cyberpunk Mask |

2019-2020

- Collaborated with a team to design and produce a Cyberpunk Mask, which was selected as a model

Industrial Protection System |

2018-2018

- Contributed to the development of an Industrial Protection System to enhance safety measures in industrial environments
- Secured the 4th position overall and received recognition for innovative solutions.

Technical Skills

Languages: Python, verilog, C

Technologies/Frameworks: Xilinx Vivado,LTspice, Cadence Virtuoso

Relevant Coursework

- Physical Design Using ASIC
- Digital CMOS
- System Design Through FPGA

CERTIFICATE

- * Certificate of Merit and Scholarship for the First Rank Holder (B.Tech. 1st Year)
- * Certificate of Python Programming
- * Certificate of Innovative Project
- * Certificate of Sofcon India Pvt. Ltd (IOT)

ACHIEVEMENT

- * Merit of scholarship for First Rank Holder
- * Model selection in AKTU Presented to the minister of Technical Education for cyberpunk mask