

Tarra Sathwik

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Education

Indian Institute of Technology, Bhubaneswar

CGPA: 7.13

B.Tech., Electronics and Computer Science Engineering

Aug. 2023 - Present

Sri Chaitanya College

Percentage: 94%

Senior School Certificate Examination

June 2021 - March 2023

Dr KKR Gowtham High School

Percentage: 99.9%

Secondary School Examination

June 2016 - March 2021

JEE Mains AIR: 5064

JEE Advanced AIR: 7992

Experience

Research Intern at IIT Bhubaneswar

(May 2025 - July 2025)

Under Dr. Devashree Tripathy, Department of Computer Science

- Gained in-depth expertise in GPU architecture and CUDA's software programming interface, and leveraged new features of the latest H100 GPUs to optimize and accelerate existing applications.
- Developed and executed CUDA benchmarking scripts for NVIDIA H100 GPUs to analyze and optimize parallel computing performance.
- Utilized microbenchmark methodologies to precisely measure and understand the structure and performance of GPU memory caching hierarchies, enhancing understanding of high-performance computing systems.
- Actively contributing to an ongoing research project with the goal of publishing a paper on GPU performance characterization.

Projects

Arduino

Arduino

IC Design

in Electronics

Course Projects

Project-1

Student portal in C

- Built a console-based application to manage and display student details, course information, and academic records.
- Features: Administrator Login Personal student login ID and password CGPA calculator Mess fee management Display and update the Issue slips Voting for preferential daily menu Student performance.

Vivado

using Verilog

Key Skills

- **Programming Languages:** C, C++, Python, CUDA, Arduino
- **Technical Software:** MATLAB, LTSpice, Logisim, Kicad, Verilog
- **Core CS Subjects:** Data structures and algorithms, GPU architecture, Parallel Programming
- **Soft Skills:** Problem solving, Teamwork, Communication, Time management

Position Of Responsibility

- Student Guide in Counseling Service Team: Providing guidance and support to fellow students to ensure a smooth academic and personal transition.
- Assistant Coordinator, CST Team – IIT Bhubaneswar – Contributed to the planning and coordination of student-centric technical initiatives under the CST team, supporting smooth execution and communication across activities.

Extra-Curricular Activities

- Sponsorship Core Team member | Pravaah, Annual Cultural Technopreneurship Fest of IIT Bhubaneswar: Coordinated and managed various aspects of the annual college fest and resource management.
- Sponsorship team Associate | Wissenaire, Techno-Management Fest: Contributed to college fest promotion and outreach to companies, developing communication strategies to enhance event visibility and participation.