



Ayush Kumar

Computer Science and Engineering
Indian Institute Of Technology, Bhubaneswar
Portfolio: **Redirect**

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EDUCATION

- Indian Institute of Technology, Bhubaneswar** 2020 - Ongoing
Dual Degree(B.Tech + M.Tech) in Computer Science and Engineering CGPA₇: 7.72
- Prakritik School** 2020
Class 12(10+2), Central Board of Secondary Education, Bihar Percentage: 92.60
- Dr. G.L. Dutta D.A.V. Public School** 2018
Class 10, Central Board of Secondary Education, Bihar Percentage: 93.20

PERSONAL PROJECTS

- SIMD – Single Instruction Multiple Data Processor with custom DRAM.** (Oct2022-Nov2022)
SIMD: Simulated version of SIMD with 32-bit Custom DRAM file on Logisim.
 - TECH-STACK: Theoretical Knowledge of Computer Organization and Architecture, LOGISIM**
 - Designed SIMD processor with 32-bit custom DRAM for optimised sequential instruction execution.
 - Achieved faster memory access and reduced latency through tailored DRAM array integration.
 - Ensured project success by leading cross-functional team, rigorous testing, and seamless processor-DRAM integration.
- iNotePad – Online Notes-taking application with fast Response time.** (May2023-Jun2023)
iNotePad is a note-taking web app where users can create accounts and take notes.
 - TECH-STACK: MERN Stack – MongoDB, Expressjs, Nodejs, React.js, Bootstrap.**
 - By ingeniously integrating multiple NoSQL databases within a single application, we have created a groundbreaking solution for load and resource distribution, specifically tailored for smaller projects. This ingenious approach minimises costs associated with high search demands and maximises efficiency, ushering in a new era of scalability and performance.
- NewsApp – Current Affairs website with real-time news.** (Sep2022-Oct2022)
React-based news app fetches trending updates in real time.
 - TECH-STACK: React.js, APIs, Bootstrap.**
 - This web application delivers concise summaries, condensing the essence of news articles into less than 40% of their original length. By distilling the most vital aspects, it empowers users to grasp crucial information swiftly and efficiently, revolutionizing the way we consume news.
 - It also cuts API latency by 20% through efficient asynchronous fetch operations for faster data retrieval.
- BirdHunter – Bird Hunter is a third-person shooting game made in a 2D environment.** (Jan2022-Feb2022)
Bird Shooter: Shoot birds, avoid harm and maximise your score.
 - TECH-STACK: Python (lib. Pygame)., Bootstrap.**
 - The primary objective of this project was to explore the Object-oriented Programming principles in Python, specifically focusing on the practical application of inheritance in real-time software, such as games.

SKILLS

Programming: C, C++, Python, JavaScript.

Web Development: HTML5, CSS3, Tailwind CSS, JavaScript, **React.js**, **Node.js**, **Express.js**, **MongoDB**.

CS Fundamentals: Computer Networks, Database Systems, Operating Systems, Object Oriented Programming.

Soft Skills: Time Management, Teamwork, Problem-solving, Documentation, Engaging Presentation.

LANGUAGES

English: Professional proficiency

Hindi: Native proficiency

INTERESTS

Web Development, 3.js, Web3 - BlockChain, Smart Contracts

Data Structures, Advanced Algorithms, Applied Algorithms, Graph Theory