

EDUCATION

- **Birla Institute of Technology Mesra, Ranchi** Ranchi, Jharkhand
Bachelor of Technology, Computer Science; CGPA: 8.91 *Sep. 2023 – Apr. 2027*

PROJECTS

ML Based Sudoku Solver (*Express.js, Redis, WebSocket, TypeScript, Tensorflow, Python*)

- **Real-Time Image-to-Solution Pipeline:** Designed and implemented a scalable backend to process Sudoku puzzle images, decode them into grids using Machine Learning, solve the puzzles, and deliver solutions via WebSocket connections.
- **Queue-Based Architecture:** Utilized Redis for efficient queuing and pub/sub messaging between image processing, solving workers, and the WebSocket server, ensuring seamless communication and workload distribution.

Meet Bot (*Node.js, Selenium-Webdriver, TypeScript*)

- **Autonomous Browser Control:** Developed a Selenium-based automation to remotely control browsers, enabling Google Meet session launches and interacting with UI elements.
- **Automated Session Recording:** Automated the process of saving recorded sessions as downloadable .webm files, streamlining meeting recording and retrieval.

eCommerce Website (*Strapi CMS, Next.js, Express.js, MongoDB, Docker, TypeScript*)

- **Booking Reservations:** Developed a slot booking system for upcoming trade shows, with an admin panel to manage bookings, slots, and exhibitions.
- **CMS-Driven Product Management:** Integrated Strapi CMS to streamline product management, allowing easy addition and removal of items.
- **Simplified Deployment:** Fully Dockerized for simplified deployment on AWS EC2, leveraging S3 buckets for efficient image storage.

EXPERIENCE

- **Embedded Sub-team Member, Robotics Club, BIT Mesra (Robolution)**
- **Member of the Photographic Society, BIT Mesra**
- **Web Team Member, IET BIT Mesra**

SKILLS

- **Languages :** C++, Java, JavaScript, TypeScript, HTML, CSS
- **Technologies :** Firebase, React.js, Node.js, Next.js, Express.js, Tailwind CSS, MongoDB, PostgreSQL, Linux, Git, AWS, Redis, WebSocket, Docker
- **Non-Technical :** Teamwork, Problem-solving, Critical thinking, Adaptability, Leadership
- **Courses :** 100xdevs 0-100 Full Stack Web Development Cohort 2.0, Object-Oriented Programming, Data Structures and Algorithms, Database Management System, Operating Systems, Computer Organization and Architecture

ACHIEVEMENTS

- **2nd Place, Regional Maze-Solving Bot Competition, Robo-Aviate, Ranchi**
- **Quarterfinalist, District-Level Badminton Tournament, Kolkata**

INTERESTS

- **Competitive Programming**
- **Web Development**
- **Photography**
- **Badminton**