

# LAKSHAY

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## EDUCATION

<b>Indian Institute of Information Technology, Manipur</b>	Manipur, India
<i>Bachelor of Technology in Computer Science and Engineering; CGPA: 7.43(upto sem 7)</i>	2022 – 2026
<b>D.A.V. Public School, Panipat</b>	Panipat, India
<i>Class XII — CBSE; Percentage: 92.6%</i>	2021
<b>D.A.V. Public School, Panipat</b>	Panipat, India
<i>Class X — CBSE; Percentage: 92.8%</i>	2019

## EXPERIENCE

<b>Intern Developer</b>	Remote
<i>MBSGames</i>	<i>May 2025 – July 2025</i>
<ul style="list-style-type: none"><li>Developed core gameplay mechanics for 'Tiny Toads,' an educational mobile game, utilizing <b>Unity and C#</b> to enhance user engagement and learning outcomes.</li><li>Engineered interactive learning modules (alphabet drawing, number counting) and optimized performance, resulting in a smoother user experience on low-end devices.</li></ul>	

## PROJECTS

<b>High-Performance Trading Platform (CLI)</b>   <i>C++, Boost.Beast, WebSocket, Deribit APIs</i>	Apr 2025
<ul style="list-style-type: none"><li>Architected a low-latency HFT simulation engine in C++, capable of processing real-time market data via Deribit APIs with <b>sub-millisecond latency</b>.</li><li>Implemented lock-free data structures and multithreaded request handling, increasing throughput by <b>40%</b> and ensuring fault tolerance under high load.</li></ul>	
<b>Course Directory</b> — <a href="#">Live Demo</a> — <i>MongoDB, Express.js, ejs, Node.js</i>	Jan 2025 – Feb 2025
<ul style="list-style-type: none"><li>Built a responsive full-stack course management platform with RESTful APIs, supporting 500+ documents and role-based access for admins and professors.</li><li>Applied MVC design pattern with clear separation of concerns, ensuring maintainable and scalable architecture.</li></ul>	
<b>Multi-User Chat Application</b>   <i>Java, Swing, MySQL, JDBC, Multi-threading</i>	Dec 2024 – Jan 2025
<ul style="list-style-type: none"><li>Built a socket-based client-server architecture with one thread per client connection model, enabling concurrent handling of multiple users chatting in real-time across different rooms.</li><li>Designed dual-mode interface (Swing GUI and CLI) with MySQL backend using JDBC for user authentication (encrypted passwords), chat room management, and persistent message history.</li></ul>	
<b>Network Scheduling Algorithm Visualizer</b>   <i>C++, Qt Framework</i>	Aug 2024 – Oct 2024
<ul style="list-style-type: none"><li>Designed and implemented an interactive visualization tool for 5 network scheduling algorithms.</li><li>Optimized rendering algorithms in <b>Qt</b>, achieving a <b>40% reduction in execution time</b> and supporting real-time visualization of complex scheduling logic.</li></ul>	

## TECHNICAL SKILLS

**Languages:** C/C++, Python, Java, JavaScript (ES6+), C#, Go

**Frameworks & Libraries:** React.js, Node.js, Express.js, Next.js, Bootstrap, Tailwind CSS, Redux

**Databases:** MongoDB, MySQL, PostgreSQL, SQL/NoSQL Design

**Developer Tools:** Git, GitHub, VS Code, npm, Postman, Linux/Unix, Agile/Scrum

**Cloud & Deployment:** Render, Docker (basic), AWS (basic)

## RELEVANT COURSEWORK

**Core CS:** Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, Computer Networks, Database Management Systems, Compiler Design

**AI & ML:** Artificial Intelligence, Machine Learning, Natural Language Processing, Information Retrieval

**Systems & Security:** Cloud Computing, Cyber Security, Cryptography, Internet of Things (IoT)

## CERTIFICATIONS & LEADERSHIP

**Web Development Bootcamp** - Udemy (Mar 2024) — 65-hour full-stack development training.

**Team Lead - Smart India Hackathon 2024** (Aug 2024) — Led 6-person development team using Agile/Scrum.

**Problem Solving** — Solved 500+ coding problems on HackerRank and LeetCode.

**Ethical Hacking and Penetration Testing** - C-DAC NOIDA (Dec 2024 – Jan 2025) — Completed online training & virtual internship under Cyber Gyan Project.