



JASKARAN SINGH BHALLA



ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	B.Tech in Textile Engineering	Indian Institute of Technology Delhi	8.17
2021	CBSE : Class XII	Sacred Heart Sen. Sec. School	97.8%
2019	CBSE : Class X	Sacred Heart Sen. Sec. School	97.2%

SCHOLASTIC ACHIEVEMENTS

- **Minor Degree, Computer Science:** Completed **23/20** credits with a **8.5 GPA** in **Dept. of Computer Science & Engn.** [2024]
- **Minor Degree, Entrepreneurship:** Completed **15/20** credits with a **9 GPA** in **Dept. of Management Studies.** [2024]
- **Department Rank:** Consistently ranked in **top 8** out of **105** students for 6 semesters under Textile Technology Department. [2024]
- **Letters of Recommendation:** Appreciated by **Prof. Abhijit Majumdar** and **Prof. Sohel Rana** for **Problem-solving abilities.** [2023]
- **100xdevs Cohort:** Advanced skills in **Development and DevOps practices** through a recognised training platform. [2024]

INTERNSHIPS

Crowwd SRL Pvt. Ltd. Brussels, Belgium | *Full stack Web Development Intern* [May'24 - July'24]

• Development & Web Engineering

- Engineered a finance-focused **Social Media Platform** using *Next.js, Prisma, Tailwind CSS, Redis* and *PostgreSQL*.
- Optimised performance with **SWR caching, Mutation**, and **Optimistic UI**, reducing response time by 50% enhancing UX.
- Designed a scalable **Notification system** with an event-driven architecture, integrating mentions and hashtags on platform.

• Data Analytics & Machine Learning

- Developed *Python AWS Lambda* function using *BeautifulSoup, Pandas* for automating **Stock Splits** through CRON job.
- Re-engineered the **ML-powered recommended feed** using *K-means clustering*, reducing computation time by 25%.
- Designed robust data pipeline using *LangChain, ScrapegraphAI* processing **1000+ articles** analysing stock sentiment.

PROJECTS

- **Personalised Professional Web Portfolio** | *jsbhalla.in* | *Self* [Jan'23 - Present]
 - Developed a **Responsive** personal website showcasing a portfolio, skills, interests, and professional achievements.
 - **Deployed** website on *Vercel platform*, **Hosted Projects on custom subdomains** and *Firebase* for enhanced organization.
- **Portal for International Research Internships** | *Prof. Naveen Garg* [Jun'22 - May'23]
 - Architected **React-based dashboard**, optimizing internship process for **1300+ students** across **20 global universities**.
 - Implemented **Robust Authentication**, integrated **20+ RESTful APIs** using *Axios*, enhancing security and user experience.
- **Sport Facility & Logistics Management Platform** | *Prof. Vireshwar Kumar* [Aug'24 - Sep'24]
 - Developed *Next.js* app with hour tracking, role-based access control, and **Complex Booking System serving 2000+ users**.
 - Developed *Notion-integrated* feedback system increasing user satisfaction and streamlining administrative workflows.
- **Financial Exchange: Real-Time Order Matching** | *100xdevs Cohort* [Aug'23 - Nov'24]
 - Designed scalable microservices **Trading System with API Engine**, *WebSocket services*, using *Redis* messaging.
 - Engineered **Real-time Order Matching engine** processing large transactions per second with low latency using *TimescaleDB*.
- **Decentralized Exchange Simulator** | *Prof. Subodh Vishnu Sharma* [Jan'24 - May'24]
 - Architected **Decentralized Exchange** prototype for *ERC20 tokens*, deploying *Solidity Smart Contracts* on *Polygon Amoy testnet*.
 - Engineered responsive frontend with *Web3.js*, enabling **Real-time interaction with Smart contracts** using *Metamask*.
- **Advanced Data Structures and Algorithms** | *Prof. Keerti Chaudhary* [Jan'23 - May'23]
 - Applied *Mini-Max Algo* with **K-step lookahead** for AI-driven game strategy to *Othello, BFS-DFS* to strategize *Snakes & Ladders*.
 - Implemented *AVL Trees, 2-3-4 Trees, Quad Tree, Decision Tree* from scratch, *Max-heap* based *Poker Simulator*, *Skip-Lists*.
- **Logic, Systems and Scalesim DRAM Mapping** | *Prof. P. R. Panda* [Jan'24 - May'24]
 - Developed an *FPGA-based Finite State m/c* with *VGA output*, **computing gradient, edge detection** on *Basys3 board* in *VHDL*.
 - Explored memory mapping methods in *Scale-Sim-V2* software to optimize *NN accelerator* performance using custom techniques.

TECHNICAL SKILLS

Programming: ◦ Java ◦ Python3 ◦ CPP ◦ JavaScript ◦ SQL ◦ LaTeX ◦ VHDL ◦ HTML ◦ CSS ◦ Bash ◦ Solidity ◦ RISCv ◦ C
Development: ◦ NextJS ◦ NextAuth ◦ ReactJS ◦ Tailwind ◦ TypeScript ◦ Prisma ◦ PostgreSQL ◦ Mongo ◦ Web Sockets ◦ webRTC
Tools: ◦ Unix ◦ Git ◦ Github ◦ Version Control ◦ Postman ◦ VS Code ◦ Figma ◦ Wireshark ◦ Vivado ◦ Arduino ◦ Notion
DevOps: ◦ Docker Containerization ◦ Monorepos ◦ Redis ◦ Scaling Server ◦ CI/CD ◦ Open API ◦ AWS ◦ Serverless ◦ nginx

EXTRA CURRICULAR ACTIVITIES

- **Winner | Mad for Ad:** Awarded for making influential ad for **Lenskart.com** through Product Marketing and Editing by **boAt**.
- **Winner | Race For Climate Action:** Facilitated for impact among 170+ ventures across 26+ countries at *Enactus Nationals 2023*.
- **Position of Responsibility: 6 Plus Leadership** roles in college societies, Core Team at Enactus, **Founder at Trijha**.



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IIT COURSE

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INTERSHIPS

- Full-Stack Web Dev (Pravritti 2024) , Crowwd SRL (2024)

COURSES DONE

Engg. Visualization & Comm., Calculus, Language & Writing Skill, Intro. To Electrical Engg., Intro. To Electrical Engg., Physics Laboratory, Electromagnetic Waves & Qua.mec., Intro. To Computer Science, Language & Writing Skill-2, Linear Algebra & Diffe. Equa., Microeconomics, Experimental Methods, Intro. To Biology For Engineer, Profe. Ethics & Social Resp., Introduction To Psychology, Data Structures And Algorithms, Product Realization Through Manufacturing, Ideation And Prototyping, New Venture Creation, Organizational Behaviour, Digital Logic & System Design, Venture Financing & Teaming, Seminar Course 2, Analysis & Design Of Algorithms, Special Module In Software Sy., Synthesis Of Digital Systems, Nss

POSITIONS OF RESPONSIBILITY

- Core Team Member, Enactus, OTH (June, 2022 - May, 2023)
- Project Manager, Enactus, OTH (June, 2023 - May, 2024)
- Project Associate, Enactus, OTH (June, 2022 - May, 2023)
- Technical Representative, AAIP, OTH (June, 2022 - May, 2023)
- Tryst Teamhead, CAIC (July, 2021 - May, 2022)

EXTRA CURRICULAR ACTIVITIES

- Winner, Mad For Ad (July, 2022 - May, 2023)
- Winner, Winners Race of Climate Action
- Buddy Mentor, Buddy Program (June, 2022 - May, 2023)
- Semi-finalists, Enactus Nationals (July, 2022 - May, 2023)
- Semi-Finalists, Enactus Nationals (July, 2022 - May, 2023)
- Designer, Enactus Nationals (July, 2022 - May, 2023)
- Website, Enactus Nationals (July, 2022 - May, 2023)

QUALIFYING EXAM

- Joint Entrance Examination (JEE) Advanced Rank: 5446 (GE)