Siddharth Aasal

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EDUCATION			
Name of course	Passing Year	Name of institute	Marks Obtained
Bachelor of Engineering	2026	Chandigarh University (CU), Mohali	8.72/10.00
in Computer Science			(CGPA)
Class XII, ISC	2021	Sacred Heart Convent School, Chandausi	91.8%
Class X, ICSE	2019	Sacred Heart Convent School, Chandausi	92.8%

CO-CURRICULAR ACTIVITIES ACHIEVEMENTS

1) Event Manager, Hyperledger India Chapter Student Society, CU

- Aug 23-Apr 30
- Led a team of 15+ volunteers, managing event promotions through social media, email campaigns, and on-campus advertising, resulting in a 30% increase in attendance.
- 2) 3rd Prize Engineer's Day Research Competition, Chandigarh University
 - Awarded 3rd place for research on Blockchain-based Supply Chain Management of Medical Supplies, designing a decentralized solution to prevent counterfeiting and enhance authenticity.

PROJECTS

- 1) Fitness Web App (Github)
 - **Integrated** an **NLP-powered meal logging system**, allowing users to describe meals in natural language while accurately parsing and tracking nutritional content.
 - Implemented a calorie calculator to estimate daily caloric needs based on user input, providing personalized dietary recommendations, with secure authentication via OAuth to protect user data.
- 2) Binary Clock (Live | Github)
 - **Designed** and developed an **interactive binary clock** using **React and TypeScript**, featuring a **minimalistic UI** that updates every second with **<50ms render time**.
 - Optimized performance by reducing unnecessary re-renders by 40%, leveraging efficient state management and animations, and deployed on Vercel for fast load times (<1s) and cross-device compatibility.
- 3) Probabilistic Data Structures Benchmarking (Github)
 - Developed a benchmarking framework to compare Count-Min Sketch, HyperLogLog, and other probabilistic algorithms.
 - Conducted experiments on large datasets to evaluate **memory efficiency**, **throughput**, **and estimation accuracy**.

COURSES AND CERTIFICATIONS

- 1) The Complete 2024 Web Development Bootcamp | Dr. Angela Yu | Udemy
- 2) Web App Network Essentials CISCO
- 3) Blockchain Technology using Ethereum and Polygon | Metacrafters
- 4) 100X Devs Cohort | Harkirat Singh
- 5) Introduction to Applied Cryptography | Coursera
- 6) Academic Paper Writing and IPR | Linkedin Learning

SKILLS

Languages: Java, TypeScript, JavaScript(ES6+), Solidity, Python

Frontend: React, Next.js, Tailwind CSS, HTML5, CSS3

Backend: Node.js, Express, WebSockets(Socket.io)

Databases: PostgreSQL, MySQL **Blockchain:** Hardhat, Ganache

Tools & Technologies: Git, GitHub, Prisma, Recoil, Docker