SHIVANSH GUPTA

ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	B.Tech in Biochemical Engineering & Biotechnology	Indian Institute of Technology Delhi	8.2
2021	CBSE	M.G Public School	96.6%
2019	CBSE	M.G Public School	94%

SCHOLASTIC ACHIEVEMENTS

- **Rajya Puraskar:** Received the Rajya Puraskar from the **Governor of Uttar Pradesh** in recognition of my excellent performance
- **Google Certification:** Earned the **Google Ads certificate** from **Coursera**, for foundational knowledge in digital advertising
- **JEE Advanced 2022:** Secured a **Rank of 937** (Gen-EWS) out of **150,000+ candidates** that appeared for the examination
- **JEE Mains 2022:** Achieved an **All-India Rank of 8271** out of **1.2 million+ candidates** with a percentile score of **99.1%**

INTERNSHIPS

- **Panscience Innovations (PSI), Delhi:** *NyaayAI*.   [Nov, 2023 - Jan, 2024]
  - **Software Developer** at **NyaayAI**, contributing to the deployment of AI-powered **pilot solutions** in **Supreme Court** and other high courts
  - Modified frontend of **Entity Extraction, Defect Analysis**, and **E-filing** pages for better user experience using **Tailwind** and **ReactJS**
  - Developed an **edit feature** for Entity Extraction, allowing users to **correct AI-extracted data**, with changes saved back to the **backend**
  - Integrated **Elasticsearch** for keyword **search functionality** (email, court, attorney, petitioner), vastly improving **data navigation**

PROJECTS

- **ZkBattleships (ETHOnline'24 Hackathon)**:   [Aug, 2024 - Sep,2024]
  - Developed Battleships using **zk-SNARKS** and **zknoid** SDK, ensuring verifiable gameplay while maintaining player privacy
  - Implemented game logic using **o1js** and **proto-kit**, with **Poseidon hashing** for state management and cryptographic operations
  - Created seamless user experience by building a React and TypeScript frontend that interacts with on-chain and off-chain components
  - Designed **"WinWitness"** structure using **ZKPs** to validate game actions, ensuring fair play without compromising performance
- **ZkAttestify (EthGlobal Superhack' 24):**   [Jul, 2024 - Aug, 2024]
  - Selected as **one** among **top 60** teams globally and **won** prize pool of **WorldCoin** and received **special recognition** by **EAS**
  - Developed a full-stack web application utilizing **RISC Zero VM** for generating and verifying **ZK proof** of the **attestation data**
  - Implemented **ABI decoding** to extract and **map attestation** schema fields, integrating them into a **proof generation** system
  - Generated and verified **Merkle tree based proofs** using **Groth16 prover** within **RISC0** , so that only **public data** is exposed
- **Image Authentication Model using Merkle tree in Rust (Collaborative Project):**   [Jun, 2024 - Jun, 2024]
  - Developed Image Authentication Model using **Rust, IPFS, Blockchain, AES Encryption**, and **Merkle Trees** to ensure image integrity
  - Extracted **MSBs from pixels**, created **new image from MSBs**, and sliced them into **non-overlapping blocks** for encryption
  - Used **AES encryption**, uploaded blocks to IPFS, generated **blockchain** transaction hashes, and **built Merkle tree** from these hashes
  - Compared **original** and **tampered Merkle trees**, used recursion to **identify differences**, and created an **array** for **verification results**
  - **Decrypted image blocks** from IPFS, **reconstructed images**, and **highlighted tampered areas** based on the verification results
- **Interactive EduHub using MERN (FLN Hackathon):**   [Apr, 2024 - Apr, 2024]
  - **Hackathon winner,** created website during a **Telangana government** organized FLN hackathon, **securing first place**
  - A website for **school children** to practice questions, intended for **trial deployment** in **Telangana** schools up to class 10
  - Developed a **visually appealing**, user-friendly frontend using **ReactJS**, tailored to **enhance** the **learning experience** for students
  - Created backend using **Node.js, Express.js** with **Supabase** to **securely store** and manage all student **details** and **scores**
  - Used **Spline3D API, Framer, GSAP** for **3D elements** and **custom animations** to create an **interactive** and **engaging** website
- **Decentralized Raffle System (Independent Project):**   [Apr, 2024 - Apr, 2024]
  - Developed a smart contract for a decentralized raffle smart contract using **Solidity, Chainlink VRF**, and **Chainlink Keepers**
  - Utilized **Chainlink VRF** and **Chainlink Keepers** for **entrance fee validation** and **raffle state management** for a fair raffle experience
  - **Optimized contract** for **gas efficiency** and comprehensive security, including **secure fund transfers** and pre-execution checks
- **NFT Collection Implementation (Independent Project):**   [Apr, 2024 - Apr, 2024]
  - Created a **dynamic NFT** smart contract on the Ethereum blockchain using Solidity, ensuring **secure** and **efficient minting**processes
  - Leveraged **OpenZeppelin contracts** for robust and standardized **ERC721 implementation**, ensuring industry standards
  - Implemented contract that allows **state changes**, enabling **NFTs** to **switch** between **HAPPY and SAD** moods, enhancing interactivity
  - **Deployed NFT contracts** on the **Sepolia testnet**, conducting **thorough testing** and **validation** to ensure functionality and reliability

TECHNICAL SKILLS

- **Programming Languages and Frameworks:** Rust, Solidity, Foundry, Circom, C++, Python, Javascript
- **Web Development:** HTML, CSS, Tailwind, JavaScript, ReactJS, MongoDB, Node.js, Express.js, Axios , Framer, GSAP, Spline
- **Software and Tools:** RISC0, Metamask, Ganache, VS Code , Figma , Git , Github , LaTeX , Autodesk Inventor , Postman

SHIVANSH GUPTA

IIT COURSE

Degree	Institute	CGPA
B.Tech in Biochemical Engineering & Biotechnology	Indian Institute of Technology Delhi	7.64

POSITIONS OF RESPONSIBILITY

• Tech Coordinator, TRYST'24, CAIC
• Activity Head, RendezvousX , BRCA (June, 2023 - May, 2024)
• BECON Executive, eDC, OTH (June, 2023 - May, 2024)

EXTRA CURRICULAR ACTIVITIES

• Winner, Dramatics General Championship (June, 2023 - May, 2024)
• Second Position, InterHostel Street Play Competition (February, 2019 - February, 2019)
• 1st position, B Roll Making (June, 2022 - May, 2023)
• Second, Bollywood quiz (June, 2022 - May, 2023)

QUALIFYING EXAM

• **Joint Entrance Examination (JEE) Advanced Rank:** 937 (GE)