JASRAJ SINGH BHATIA

ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	B.Tech in Textile Engineering	Indian Institute of Technology Delhi	7.81
2019	CBSE	DAV Public School, Bhilai	89.4
2017	CBSE	DAV Public School, Bhilai	9.2

SCHOLASTIC ACHIEVEMENTS

- **Minor Degree in Computer Science:** Registered for 13/20 credits required for Minor Degree. **GPA: 9.37** on a scale of 10
- **Received Academic Excellence Award** (Class XI) from DAV Public School, awarded to the **top 1%** of students in the batch.
- **Semi-Finalist, Flipkart GRiD 4.0 - Software Development Challenge: Only Team** from IIT Delhi to get Selected

INTERNSHIPS

- **SDE, Amazon, ATS Product & Tech**: *AWS Step Functions Optimization*   (May, 2023 - July, 2023)
  - Identified and resolved AWS Step Function failures by optimizing inefficient workflows, effectively **mitigating operational disruptions**
  - **Enabled $1M in annual savings** by eliminating unnecessary executions and achieving a remarkable **100x cost reduction**
  - Extended maximum workflow run time from **18 days to 365 days**, enhancing operational flexibility for long-term operations
- **Backend and App Developer, Ruhi, Remote:** *Social Media App for Non-Resident Indians*   (July, 2022)
  - Enhanced the Media Compression during transmission and storage which **reduced data usage and loading times by 60%**
  - Improved the Chat Processing Algorithm and used **Hash Maps** which reduced the time complexity from **O(n^2) to O(nlogn)**
  - Implemented RSA end-to-end encryption, bolstering app security by preventing unauthorized data interception

PROJECTS

- **Smart Home Solutions** *Internet Of Things (IoT), Microcontrollers, Flutter, Node.js, MongoDB*   (Oct, 2020 - Aug, 2021)
  - Developed intelligent home automation systems by transforming traditional switchboards into Wi-Fi-enabled smart switchboards
  - Received **Works with Hey Google Certification**, devices can be controlled using Google Assistant & Google Home App
  - Improved the **response time by 80%** by transitioning from chaining synchronous web requests with asynchronous web requests
- **eCommerce warranty system using NFTs** *Blockchain, NFTs, Smart Contracts*   (July, 2022)
  - Developed an application that generates a **Non-Fungible Token (NFT)** and transfers it to the customer's account upon product purchase
  - Created a **Smart Contract** for the warranty system, allowing brands and retailers to validate purchase authenticity and warranty duration
  - **Mitigated false claims** by programming the NFTs to decay and eventually get destroyed post the warranty period
- **Sahay: ChatGPT Powered Chatbot for Solving Complex Legal Queries** *React.js, OAuth*   (Apr, 2023)
  - Developed chatbot, leveraging the **GPT-3.5-turbo model by OpenAI,** to provide quick and accurate responses to legal queries.
  - Developed a responsive user-friendly interface using latest **frontend technologies**, ensuring accessibility for non-legal experts.
- **Excel-to-Predictive API SaaS Platform** *Machine Learning, AWS, Docker*   (Aug, 2023)
  - Developed a platform that processes Excel data with specified input/output columns, trains an **ML model**, and generates a prediction API
  - Implemented a feature allowing users to either select an ML model or automatically opt for the best-suited model based on the data
  - Added a rate limiter to manage daily API requests, ensuring fair usage and optimized performance by preventing abuse and overuse

TECHNICAL SKILLS

- **Languages and Frameworks:** Java, C/C++, SQL, HTML 5, CSS 3, JavaScript, Flutter
- **Libraries**/**Softwares:** Angular.js, MongoDB, Express.js, React.js, Node.js (MERN Stack), Bootstrap, Microsoft Office
- **Skills:** Git, Project Management, Internet Of Things (IoT), Cryptography, Blockchain, Automation
- **Microcontrollers (Arduino based), Sensors** and protocols for communication between them such as UART, I2C & SPI

POSITIONS OF RESPONSIBILITY

- **IT Manager, Board for Hostel Management Website, BHM IIT Delhi**   (October 2021 - May, 2022)
  - Worked on Website Design and Project Management (**managed four developers**, BHM Secretaries, and a designer)
  - Integrated React.js components received from various developers using GitHub, was a significant contributor to website code
  - **Facilitated easy maintenance** of a website by using Google Sheets for data which enabled representatives to update data on the go
  - Deployed website on IITD Servers, Created scripts to handle future deployments, and tutored developers about the latest technologies
- **Technical Contributor (Full Stack Developer), OCS IIT Delhi**   (April, 2021 - April, 2022)
  - Identified and resolved **critical bugs in the authorization** module, which gave users anonymous access to admin-only endpoints
  - Enhanced the database structure, which removed redundant data, improved space usage by **67%**, and increased code efficiency
  - Improved design and functional code of various Angular.js components which improved the overall **User Experience** of the website

EXTRA CURRICULAR ACTIVITIES

- Backend Developer at **DevClub IIT Delhi** - Took lectures in Tour of Stalls and Lecture series for freshers

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IIT COURSE

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B.Tech in Textile Engineering	Indian Institute of Technology Delhi	7.81

COURSES DONE

Intro. To Electrical Engg., Intro. To Computer Science, Linear Algebra & Diffe. Equa., Electromagnetic Waves & Qua.mec., Calculus, Engg. Visualization & Comm., Microeconomics, Experimental Methods, Data Structures And Algorithms, Product Realization Through Manufacturing, Mini Project

QUALIFYING EXAM

• **Joint Entrance Examination (JEE) Advanced Rank:** 1271 (GE)

POSITIONS OF RESPONSIBILITY

• Developer, DevClub, CAIC (July, 2021 - May, 2022)
• Developer, DevClub, CAIC (July, 2021 - May, 2022)
• Technical Team Member, OCS, OTH (January, 2021 - March, 2021)
• Technical Executive, BHM (July, 2021 - May, 2022)
• Executive, DevClub, CAIC (June, 2022 - May, 2023)