

SUMIT CHANDRA

B.Tech. - Computer Science & Engineering
Email: chandra78.sumit1@gmail.com
South West Delbi, Delbi, India - 110043





EDUCATION

EDUCATION	
Maharaja Agrasen Institute of Technology B.Tech Computer Science & Engineering Percentage: 74.78 / 100	2026
rao mohar singh memorial sr. sec. public school, South West Delhi 12 th CBSE Percentage: 90.40 / 100	2022
rao mohar singh memorial sr. sec. public school, South West Delhi 10 th CBSE Percentage: 89.20 / 100	2020

INTERNSHIPS

cantilever | IT / Computers - Software

Web Developer

Key Skills: MERN stack full stack web development

During my one-month internship at Cantilever.in as a web development intern, I had the opportunity to enhance my technical skills, collaborate with professionals, and gain hands-on experience in building and managing web applications. This internship provided invaluable insights into the industry, enabling me to apply my theoretical knowledge to practical projects.

14 Jun, 2024 - 15 Jul, 2024

Internship Objectives and Expectations

Upon joining Cantilever.in, my primary objectives were to:

- Gain practical experience in web development using HTML, CSS, JavaScript, and modern frameworks.
- Develop responsive and user-friendly web applications.
- Work collaboratively in a team environment and understand project workflows.
- Learn about backend technologies such as Node.js, Express.js, and database management using MongoDB and Firebase.
- Improve problem-solving skills by tackling real-world challenges in web development.

Week 1: Frontend and Admin Panel Development

The first week of my internship focused on understanding the company's development environment and tools. I was assigned the task of developing the frontend and admin panel for an e-commerce platform. This involved:

- Designing web pages using HTML, CSS, and JavaScript.
- Implementing Tailwind CSS to create responsive designs efficiently.
- Utilizing React.js for dynamic user interfaces and better state management.
- Developing the admin panel to allow product management, order tracking, and user management.
- Ensuring cross-browser compatibility and responsiveness for different devices.

During this week, I encountered challenges such as optimizing CSS for responsiveness and integrating dynamic components using React.js. However, through guidance from my mentor and self-exploration, I overcame these challenges and successfully implemented the UI components.

Week 2: Backend Development and API Integration

The second week focused on backend development and integrating APIs to make the application functional. My key responsibilities included:

- Setting up a Node.js and Express.js backend server.
- Designing and implementing RESTful APIs to handle user authentication, product management, and order processing.
- Connecting the frontend with the backend using fetch API and Axios.
- Managing user sessions and authentication using JWT (JSON Web Token).
- Storing and retrieving data from MongoDB, ensuring efficient database management.

I faced some difficulties in handling authentication and authorization processes, but through debugging and learning about middleware functions in Express.js, I was able to successfully implement secure login and role-based access control for users and admins.

Week 3: Responsive Design and Performance Optimization

The third week focused on improving the overall user experience (UX) and ensuring that the website was responsive and optimized for different devices. My tasks included:

- Enhancing mobile responsiveness using media queries and Tailwind CSS utilities.
- Reducing page load times by lazy loading images and optimizing API calls.
- Implementing SEO-friendly practices such as meta tags, alt attributes for images, and structured data.
- Testing the application on multiple devices and browsers to identify and fix inconsistencies.

Week 4: Developing a News Website with Firebase

In the final week, I was assigned an independent project to develop a news website using Firebase as a backend service. The key tasks involved:

- Designing the website's frontend using React.js and Tailwind CSS.
- Integrating Firebase Firestore to store and retrieve news articles dynamically.
- Implementing authentication for admin users to upload and manage news articles.
- Using Firebase's real-time database features to display live updates on the website.
- Deploying the project and ensuring that it was functional and visually appealing.

This project was a significant learning experience as it required me to work independently, make architectural decisions, and troubleshoot errors without direct supervision. I gained a deep understanding of Firebase's authentication, Firestore database structure, and cloud storage.

Challenges and Problem-Solving Strategies

Throughout the internship, I faced several challenges, such as:

- 1. Debugging API errors Encountered CORS issues while fetching data from backend APIs. Solved this by configuring appropriate headers in Express.js.
- 2. Managing state in React.js Initially struggled with prop drilling and inefficient state management. Overcame this by using React Context API.
- 3. Authentication and Security Issues Ensured user authentication using JWT and implemented bcrypt for password hashing.
- 4. Database Structuring Learned how to efficiently structure MongoDB collections for better query performance.

5. Handling Deployment Issues – Faced challenges while deploying projects on Vercel and Firebase Hosting, but learned how to configure environment variables and optimize hosting settings.

Key Learnings and Takeaways

My one-month internship at Cantilever.in provided me with extensive learning opportunities, both technical and professional. Some of the key takeaways include:

- Technical Skills:
- Proficiency in HTML, CSS, JavaScript, and React.js.
- Understanding of Node.js, Express.js, and MongoDB.
- Hands-on experience with RESTful APIs and authentication mechanisms.
- Practical knowledge of Firebase for backend development.

PROJECTS

E commerce site 14 Jun, 2024 - 15 Jul, 2024

Mentor: Ashok Ladumor | Team Size: 1

Project Link: https://github.com/Sumit123chandra/e_commerce_site

News Platform 14 Jun, 2024 - 15 Jul, 2024

Mentor: Ashok Ladumor | Team Size: 1

Project Link: https://github.com/Sumit123chandra/Cantilever-News platform

ACHIEVEMENTS

• Secured 3rd position in Shlokadecode Hackathon at NSUT (April 2025) by building a Hindi learning platform within 4 to 5 hours.

PERSONAL DETAILS

Gender: Male

Marital Status: Single

Current Address: 2B DURGA VIHAR BENGALI PAINTER WALI

Phone Number: +91-9560288918

GALI, Deendarpur Najafgarh new delhi, South West Delhi, Delhi,

India - 110043

 $\textbf{Emails:} \ chandra 78. sumit 1@gmail.com\ ,\ chandra 78. kailash@gmail.com$

WEB LINKS

• Github - https://github.com/Sumit123chandra