

# Manan Bhasin

☎ 8607838788 ✉ [manan1869.be22@chitkara.edu.in](mailto:manan1869.be22@chitkara.edu.in) 🔗 [linkedin.com/mananbhasin5657](https://www.linkedin.com/company/mananbhasin5657) 🌐 [github.com/manan5657](https://github.com/manan5657)

## Education

### Chitkara University, Rajpura, Punjab

Expected June 2026

*Bachelor of Engineering in Computer Science and Engineering (Current CGPA: 9.27 / 10.00)*

*Rajpura, Punjab*

- **Relevant Coursework:** Machine Learning, Deep Learning, Image Processing, Data Structures, Algorithms, Artificial Intelligence
- **Research Interests:** Interdisciplinary Research, Machine Learning, Deep Learning, Image Processing

### K.L. Arya DAV Public School, Hisar

CBSE

*Higher Education*

*Hisar, Haryana*

- **Class 12th - CBSE Board (2022):** Scored 85.27%
- **Class 10th - CBSE Board (2020):** Scored 91.2%

## Experience

### Nano Research Lab, Chitkara University

December 2023 – Present

*Research Intern*

*Rajpura, Punjab*

- Conducted morphological analysis and grain size distribution (GSD) of SnO<sub>2</sub> nanoparticles under varying calcination temperatures, contributing to a published research paper.
- Developed and optimized MATLAB code for extracting and analyzing conductive networks from SEM images, enhancing the accuracy of nanoparticle characterization.
- Collaborated with an interdisciplinary team to explore machine learning applications in nanoparticle research, driving innovation in image processing techniques.

## Projects

### BreezyBnB | Full Stack Application with EJS, Node.js, Express, MongoDB | Demo

- BreezyBnB is a full-fledged vacation rental booking platform. Users can browse listings, book vacation rentals and provide their reviews seamlessly.
- The backend is powered by Node.js with a MongoDB database, allowing for efficient data management.
- A user authentication system ensures secure logins and session management for both hosts and travelers.
- Payment gateway integration is planned for future development, enhancing the platform's booking capabilities.

### LearnLynx | Full Stack Application with React.js, Node.js, MongoDB, Express.js, and RazorPay | Demo

- LearnLynx is a modern, comprehensive learning management system (LMS) that provides educators and students with a seamless platform for online learning.
- Key features include secure user authentication, a personalized dashboard for students, and responsive design for an optimal learning experience across devices.

### AI-Enhanced Note Mastery | Next.js, shadcn, LiveBlocks, CloudFlare, Firebase, Clerk | Demo

- AI-Enhanced Note Mastery is a sophisticated note-taking application designed to help users organize and optimize their study materials with the assistance of artificial intelligence.
- Firebase is used for cloud storage and real-time database management, while Clerk handles secure authentication. The app also integrates CloudFlare for improved security, performance and CloudFlare Workers for translating and providing summary of the note using AI.

### StartupMeets | Next.js, TypeScript, shadcn, NextAuth, Sanity | Demo

- StartupMeets is a platform designed to empower entrepreneurs by allowing them to submit their startup ideas for virtual pitch competitions. The clean, minimalistic design makes it easy to navigate and engage with the community.
- Key features include GitHub authentication for easy login, a submission process that supports multimedia content, a view count tracker for each pitch, and an "Editor Picks" feature for highlighting top ideas. The platform's backend is managed with Sanity's CMS, providing an easy-to-use interface for admins.

## Technical Skills

**Languages:** Java, C/C++, Python, Javascript, TypeScript, SQL (Postgres), HTML/CSS, MATLAB, LATEX, Bash

**Technologies:** React.js, Next.js, Express.js, TensorFlow, Bootstrap, Tailwindcss, Shadcn, Node.js, React Three Fiber, Hono

**Concepts:** Artificial Intelligence, Machine Learning, Neural Networks, API, Database Normalization, Agile Methodology, Computer Networks, Operating Systems