

Khusham Bansal

Roll No.: 102303295

Bachelor of Engineering

Thapar Institute of Engineering and Technology, Patiala

+91-9464380089

✉ kbbkhushambansal@gmail.com

🐙 GitHub Profile

🌐 LinkedIn Profile

EDUCATION

- **Bachelor of Engineering in Computer Engineering** 2023-Present
Thapar Institute of Engineering and Technology, Patiala CGPA: 8.80
- **Intermediate/+2** 2022
Saint Fateh Singh Convent School, Maur, Bathinda Percentage: 85
- **Matriculation** 2020
Saint Xavier's School, Bathinda Percentage: 92.8

EXPERIENCE

- **Full-Stack Development Intern** October 2024 - Present
AltHire AI, USA Remote
 - Designed and developed landing pages for AltHire AI, MockMate and TalentBoost
 - Led the technical implementation of landing pages, reducing load times by 70% through optimized component architecture.
 - Automated the end-to-end testing of both the products of AltHire AI (MockMate and TalentBoost).
 - Reduced API calls from $7 \times n$ to 10 total, cutting network overhead by up to 98% for large candidate batches.
- **Web Development Intern** January 2025 - February 2025
Carpe Global, USA Onsite
- **Computer Science Subject Matter Expert** February 2024 - Present
Chegg Online
 - Helped students by solving 150+ computer science questions.
 - Quality Check Score: 4.01/5.

PERSONAL PROJECTS

- **Building AviVurse**
A platform to connect the entire college community together.
 - A comprehensive academic platform with secure authentication for students, faculty, and administrators
 - Implemented robust course management system featuring enrollment tracking and assignment submission workflows
 - Built real-time communication system with WebRTC-powered video/voice calls and instant messaging capabilities
 - Engineered interactive society management portal for student organizations with announcement distribution
 - Designed scalable MongoDB database architecture using Prisma ORM for efficient data management
 - Created responsive UI with Next.js, React, and TailwindCSS, providing seamless cross-device experience
 - Implemented WebSocket-based real-time notifications and connection management system
- **Body Fat Predictor**
Developed a machine learning model to predict Body Fat Percentage (BFP) using accessible fitness and health metrics.
 - Integrated diverse features including BMI, heart rate, workout patterns, anthropometric data, and other exercise metrics.
 - Aimed to provide a scalable, accurate, and user-friendly solution for health monitoring and obesity risk assessment.
 - Improved upon traditional BFP estimation methods by leveraging data-driven, multivariate analysis techniques.
 - Designed for broad applicability across the general population with a focus on ease of data collection.
- **Medicine Inventory Backend**
A RESTful API for managing medicine data.
 - **CRUD Operations:** Create, Read, Update, and Delete medicine records.
 - **Searching:** Search medicines by name.
 - **Filtering:** Filter medicines by manufacturer and other fields.
 - **Sorting:** Sort medicines by name, price, quantity, etc.
 - **Optional Image Upload:** Store image URLs for medicine records
 - **Caching using Redis:** Enhanced response time by 5x through optimized caching strategies.
 - **Technology Used:** JavaScript, Node.js, Express.js, MongoDB, Redis.
- **Twitter Trends Scraper**
A Selenium script that can read the Twitter home page.
 - Fetches the top 5 trending topics under “What’s Happening” section from the homepage
 - Built a user-friendly HTML interface featuring one-click script execution and real-time results display.
 - **Tech Stack:** Python, Selenium, MongoDB, ProxyMesh, HTML, JavaScript

TECHNICAL SKILLS AND INTERESTS

Languages: C/C++, Python, JavaScript, HTML+CSS

Libraries : C++ STL, React.js

Development Tools: Node.js, VScode, Git, GitHub

Frameworks: Express.js, Tailwind CSS, Playwright

Cloud/Databases:Microsoft Azure, MongoDB

Relevant Coursework: Artificial Intelligence, Data Structures, Design and Analysis of Algorithms, DBMS, Operating Systems, Object Oriented Programming

Areas of Interest: Web Design and Development, Finance, Reading

Soft Skills: Problem Solving, Self-learning, Presentation, Adaptability, Agile Methodology, Scrum

Certifications: Introducing Generative AI with AWS, Azure, The Complete 2024 Web Development Bootcamp, Google UX Design

ACHIEVEMENTS

•**Shortlisted for the Smart India Hackathon in 2023 and 2024 via internal hackathons**

•**Reliance Scholar'23:** Awarded Rs.2,00,000

•**International Rank 97 in NSTSE'22 conducted by Unified Council**

•**State Rank 6 in iTHO'17 conducted by Silverzone**