

Khusham Bansal

Roll No.: 102303295

Bachelor of Engineering

Thapar Institute of Engineering and Technology, Patiala

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GitHub Profile

LinkedIn Profile

EDUCATION

Bachelor of Engineering in Computer Engineering

Thapar Institute of Engineering and Technology, Patiala

2023-Present

CGPA: 8.80

Intermediate/+2

Saint Fateh Singh Convent School, Maur, Bathinda

2022

Percentage: 85

Matriculation

Saint Xavier's School, Bathinda

2020

Percentage: 92.8

EXPERIENCE

Full-Stack Development Intern

AltHire AI, USA

October 2024 - Present

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

Carpe Global, USA

January 2025 - February 2025

Onsite

Computer Science Subject Matter Expert

Chegg

February 2024 - Present

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**