

# TUSHAR MISHRA

CS STUDENT | AI & WEB DEV ENTHUSIAST

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## ABOUT ME

I'm a Sagittarian at heart—naturally optimistic, intellectually curious, and deeply committed to my passions. Always eager to explore new ideas and experiences, I thrive in dynamic environments. A proud achievement of mine is ranking in the **top 1% out of 1.1 million candidates in the highly competitive JEE exam**. I'm a tech enthusiast, a dedicated self-learner, and constantly pushing the boundaries of what I can create and understand.

## EDUCATION

**2023 - 2027**

Bhabha University

**Bachelor of Technology , CSE**

4th sem Computer Science Student at Bhabha Engineering Research Institute. Passionate about solving real-world problems through technology and currently exploring areas like AI, web development, and system design.

\*\*\* Self Learning, **Documentation**, Youtube & ChatGPT are my resources

## PROJECTS

### Currently Working

Search Engine 

#### Rust, HTML, JS, TF-IDF, XML-parsers

- Ultra-Low Latency: Delivers search results in **~10ms**, making it highly responsive for real-time querying.
- Efficient Indexing: Parses and indexes XML files within a specified directory for fast lookup.
- TF-IDF Ranking: Uses the **Term Frequency-Inverse Document Frequency** (TF-IDF) algorithm to rank document relevance.
- Top-K Results: Returns the top 20 documents most relevant to the user's search prompt.
- Extensible Format Support: Planned future support for .txt and .pdf formats to expand indexing capabilities.
- **Command-Line Interface**: Lightweight and scriptable tool, ideal for power users and integration into automated workflows.

### Few weeks ago

Image Gallery 

#### Next.js, Prisma, Clerk, ImageKit, Neon (postgreSQL), Vercel

- Building a secure image and wallpaper sharing platform with user authentication via Clerk.
- Integrated ImageKit for optimized media storage and delivery.
- Added features for commenting, sharing, and downloading media — designed for easy collaboration among friends.

## 1 month ago

Realtime Chat 💬

**React, TypeScript, WebSockets, WebContainers, Gemini AI, MongoDB**

- Developed a collaborative chat platform supporting multiple users with live messaging via **WebSockets**.
- Integrated Gemini AI to respond to "@ai" prompts, rendering live code outputs using **WebContainers**.
- Implemented full authentication and blacklist feature for secure interactions.

## 2 months ago

Uber Clone 🚗

**React, Leaflet.js, OpenStreetMap, Node.js, MongoDB**

- Built a real-time ride-request platform where users can connect with nearby drivers (within 5km radius).
- Used **Leaflet.js** and **OpenStreetMap** to display driver and user locations interactively.
- Focused on geolocation matching and request routing logic.

## 🔧 TECHNICAL SKILLS

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### 🌐 Frontend Development

React, **Next.js**, **TypeScript**, JavaScript, HTML5, CSS3,  
Tailwind CSS, Responsive Design, Image-Kit

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### ⚙️ Backend Development

**Rust**, REST APIs, MongoDB, **Web-Sockets**, Neon (PostgreSQL),  
Drizzle ORM, Redis, Clerk Auth, **Zod**, Node.js, Express.js

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### 🎨 UI/UX Design

Figma, UI Design, UX Research, Wireframing, Prototyping,  
**GSAP**, Shadcn, Remix Icon, Material UI

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### ⚙️ Development Tools

Git & GitHub, ESLint, Prettier, Docker, Postman

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### 🧠 Other Skills

Python, NumPy, Pandas, Matplotlib, Scikit-learn

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### 🚀 Future Learning Goals

Kubernetes, Flutter, Dart, Three.js, TensorFlow, OpenCV

# WHY ME ?

## STRENGTH

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-  Fast Learner: Quickly adapts to new technologies, frameworks, and tools in fast-paced environments.
-  Clean, Scalable Code: Follows industry-standard coding practices with an emphasis on maintainability and performance.
-  AI-Enhanced Productivity: Leverages GitHub Copilot and ChatGPT to accelerate development, automate repetitive tasks, and troubleshoot effectively.
-  Version Control Proficiency: Experienced with Git, GitHub workflows, branching strategies, and collaborative code management.
-  Problem Solver: Strong debugging skills with a keen eye for UI/UX bugs, performance bottlenecks, and cross-browser issues.
-  Efficient & Organized: Excellent time management and prioritization skills; delivers high-quality code on schedule.