

# CHERAG SAXENA

Software Engineer | Full Stack Developer | MERN Stack | Cloud Computing

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**Portfolio:** cheragsaxena.vercel.app | GitHub: github.com/cherag-16 | LinkedIn: linkedin.com/in/cherag-saxena-36415a2b8

## PROFESSIONAL SUMMARY

Software Engineer and Full Stack Developer with 2+ years of experience building scalable MERN stack applications. Co-inventor on a filed Indian Patent (No. 202621056495) and published book chapter author in a Wiley Scrivener academic publication. Completed 3 internships including IIT Bombay collaboration. Holds 33+ certifications (Azure AZ-900 — 900/1000, AWS). CGPA 8.20, First Year Academic Honors. Seeking a Software Engineer or Full Stack Developer role.

## TECHNICAL SKILLS

**Frontend:** React.js, Next.js, JavaScript (ES6+), TypeScript, HTML5, CSS3, Tailwind CSS v4, Redux, shadcn/ui

**Backend:** Node.js, Express.js, RESTful APIs, JWT Authentication, Python

**Database:** MongoDB, Supabase (PostgreSQL), SQL Server, Firebase

**AI & Cloud:** Groq AI, OpenAI API, Gemini API, Azure (AZ-900), AWS, Web Audio API, Tone.js

**Tools & Soft Skills:** Git, GitHub, Netlify, Vercel, Figma, Agile/Scrum | Leadership, Mentoring, Team Collaboration

## RESEARCH & PUBLICATIONS

### Patent Filed | No. 202621056495 | May 2026 | 100% Complete

**Title:** A System and Method for Cloud-Based AI Raag-Guided Lyric-to-Melody Generation

**Co-Inventors:** Dr. Prashant Jain, Dr. Satyendra Sharma, Dr. Sumit Jain, Dr. Piyush Moghe, Ms. Dimmika Rajak, Mr. Cherag Saxena, Mr. Chaitanya Verma — SAGE University, Indore

- Invented a cloud-based AI system generating Indian classical music from lyrics using raag theory, emotion detection, and human preference learning — no comparable technology exists.
- Fields: Artificial Intelligence, Computational Musicology, Cloud Computing, NLP, and Creative AI.

### Book Chapter — Accepted & Submitted | Wiley Scrivener Publishing | Dec 2025

**Title:** Neurological Mode in AI-Powered Collaborative Learning: Enhancing Accessibility and Engagement with CodeMentorAI

**Book:** Advances in Neurological and Neuromuscular Disorders using AI — **Wiley Scrivener Publishing**

**Editors:** Dr. Aditya Khamparia, Dr. Deepak Gupta, Dr. Sagar Dhanraj Pande | **Mentor:** Dr. Ati Jain, Associate Professor, SAGE University, Indore

**Author:** Cherag Saxena — B.Tech (Computer Engineering – Software Engineering), Institute of Advanced Computing, SAGE University, Indore

## INTERNSHIP EXPERIENCE

### Web Development Intern | My Job Grow × IIT Bombay (Techfest)

Oct 2024 – Dec 2024

MERN Full Stack | Hybrid | Outstanding Achievement

- Led development of 2 production-ready full-stack apps (TrackMyExpenses + ChatBox) using React, Node.js, Express, MongoDB — deployed on Netlify and Render.
- Drove Agile workflows, led code reviews, and earned 'Outstanding Achievement' recognition + dual certificates from My Job Grow and Techfest IIT Bombay.

### Website Design & Development Intern | Vishal Global Tech (VGT)

Jan 2025 – Feb 2025

Full Stack | Greater Noida | Successfully Completed

- Work on a live project indelhincr.com
- Built responsive production pages for indelhincr.com using HTML5, CSS3, JavaScript, and SQL Server; followed full SDLC under senior mentorship.

### Azure Fundamentals Training | Microsoft (Certiport)

June 2025

AZ-900 | Score: 900 / 1000 | Credential ID: Cx35-Dw8X

- Completed hands-on Azure labs (VMs, storage, VNets, Azure AD) and applied cloud security and cost management best practices.

## PROJECTS

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**Dhun AI — Indian Classical Music Composition System** | Next.js 16, Groq AI, Tone.js, Web Audio API, Supabase, Tailwind CSS v4

Role: Project Architect & Lead Developer | Patent Filed: 202621056495

- Architected full-stack AI platform composing authentic Indian dhuns from Hindi lyrics using raag theory, Groq AI mood detection, and oscillator-based audio synthesis (ADSR, reverb, 5 instruments).
- Designed 10+ REST API routes and Supabase PostgreSQL schema; engineered WAV export from Web Audio API output.
- System architecture directly informed the co-filed Indian Patent (No. 202621056495).

cheragsaxena.vercel.app/portfolio/dhun-ai | Private Repo — available on request

**Code Mentor AI** | MERN Stack, OpenAI API, Gemini API, Netlify

Role: Project Lead | Team Project | Wiley Book Chapter Published

- Led full-stack AI mentoring platform (end-to-end SDLC) solving 'tutorial hell' — dual AI API integration (OpenAI + Gemini) for context-aware code review and personalized learning paths.
- Built JWT auth, user dashboard, and interactive code review flows; platform's learning model contributed to accepted Wiley Scrivener book chapter.

code-mentorai.netlify.app | cheragsaxena.vercel.app/portfolio/code-mentor-ai

**Track My Expenses** | React, Node.js, Express, MongoDB, Tailwind CSS

Role: Solo Full Stack Developer | First Full-Stack Project — My Job Grow Internship

- Independently built complete MERN finance tracker — JWT auth, real-time state management, category-based budgeting, historical transaction log, and mobile-first UI.
- Deployed on Netlify + Render with CI/CD pipeline via GitHub.

trackmyexpenses.netlify.app | cheragsaxena.vercel.app/portfolio/track-my-expenses

**CK E-Commerce — Premium Shopping Platform** | Next.js, React, Tailwind CSS, Vercel

Role: Solo Full Stack Developer | Live Production

- Built full-featured e-commerce platform with 8 product categories, real-time cart system, deals/discount logic, and 10,000+ product catalogue — deployed on Vercel.

ck-e-commerce.vercel.app

**Indelhincr.com** | HTML5, CSS3, JavaScript, SQL Server

Role: Frontend & Full Stack Contributor | Vishal Global Tech Internship

- Developed responsive B2B production platform with Web API integration, SQL Server backend, and cross-browser performance optimizations.

indelhincr.com

More projects: GitHub: [github.com/cherag-16](https://github.com/cherag-16)

## EDUCATION

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**B.Tech — Computer Engineering (Software Engineering)** | Sage University, Indore 2023 – 2027

CGPA: 8.20 | Top 10% of Class | **Best Excellence Award — First Year Academic Honors (2024)**

Coursework: DSA, DBMS, Software Engineering, Web Technologies, Computer Networks, OS, Cloud Computing

## CERTIFICATIONS (SELECTED FROM 33+)

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**Microsoft Azure AZ-900** (Score: 900/1000, Certiport, June 2025) | **AWS Cloud Practitioner Essentials** (AWS, July 2025)

**UAS Bootcamp 4.0 – AI/ML for Drones** (IIT Indore + MeitY, 2024, 40+ hrs) | **IIT Symposium 2.0** (IIT Indore, 2024–25)

33+ verified certifications — DevTown bootcamps, AWS modules, Microsoft Learn badges & more

## ACHIEVEMENTS & LEADERSHIP

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- Indian Patent Co-Inventor — Filed No. 202621056495 for AI Raag-Guided Lyric-to-Melody Generation (May 2026).
- Wiley Scrivener Book Chapter Author — 'Neurological Mode in AI-Powered Collaborative Learning' accepted & submitted (Dec 2025).
- Best Excellence Award — First Year Academic Honors, Sage University (2024).
- Led Dhun AI (Patent) and Code Mentor AI (Book Chapter) end-to-end — research-to-product leadership as a 3rd-year student.
- 3 Community Appreciation Awards — DevTown / GDSC for peer mentoring and community learning contributions.
- Active hackathon and coding competition participant (2024–2025).