Omkar More

✉ Email: theomkarmore@gmail.com   📞 Phone:+91 9370832495   in theomkarmore   ⊙ RoyalBeast2211

Education

Visvesvaraya National Institute of Technology, Nagpur *Aug 2023 – May 2027*
Bachelor of Technology: CGPA 8.29/10

- **Coursework:** Computer Programming, Discrete Mathematics, Data Structures, Algorithms, Material Data Science and Programming, Self Taught : Object Oriented Programming, Database Management System, Operating System, Computer Networks

Projects

GitLike: Version Control System : Python, Argparse, Zlib, SHA-1 hashing   *Code* ↗

- Developed a command-line VCS implementing repository, staging, committing, branching from scratch.
- Added .gitignore parsing, reference management, and a staging index compatible with Git config formats.
- Engineered a SHA-1 object database with zlib compression and implemented 15+ Git commands (init, commit, log, cat-file, etc.) replicating Git's core workflows and data structures.

RayTracer: Ray Tracing Engine : C++, Object-Oriented Design   *Code* ↗

- Created raytracer rendering spheres with recursive reflection, refraction, shadows, and Lambertian shading.
- Implemented ray-sphere intersection, Fresnel effect blending, and bias correction to avoid self-intersection.
- Built Vec3 class for 3D vector and color math supports normalization, dot products, and component operations.

Chatty: Real Time Chat Application : MERN, Socket.io   *Code* ↗

- Built a full-stack chat app with WebSockets enabling real-time messaging between concurrent users.
- Developed a React SPA with JWT authentication, typing indicators, and MongoDB-based chat history.
- Deployed on **Render** with 15+ REST APIs and Cloudinary integration for image uploads. [Live Website] ↗

VNIT Telephone Directory: (Team Project) : Flutter, Dart   *Code* ↗

- Created Telephone directory mobile app, integrating 4000+ department and faculty contacts with advanced search and filter features, benefiting 5000+ students and faculty. Improved lookup efficiency by 100
- Enabled offline access by parsing and transforming large JSON datasets into lightweight local storage.
- Collaborated with a team of 4 using Git workflows to maintain code quality and resolve merge conflicts.

Database Management System Using B+ Trees : C++, Data Structures   *Code* ↗

- Utilized order-4 B+ trees to index and interlink 4 databases, enabling O(log N) query efficiency.
- Designed 6+ complex cross-database queries to identify missing PANs, multiple accounts, LPG subsidy beneficiaries, and data inconsistencies.

Technologies

Languages: C, C++, Dart, Python, JavaScript, TypeScript, SQL
Technologies: MongoDB, Express.js, React.js, Next.js, Node.js, Tailwind, Linux CLI, REST APIs
Tools: Git, GitHub, Visual Studio Code, Postman, Android Studio

Achievements

- 3-Star **1600** Rating on CodeChef ↗, **1700+** Rating on Leetcode ↗, **800+** questions solved on Codolio ↗.
- Secured JEE Mains Top **5%** nationwide; **Silver Medalist** in National Cyber Olympiad (school level).
- Organized the **first** inter-hostel hackathon, coordinating participants, logistics, and execution.
- Led technical development and deployed a biometric access system used by **600+** students across **2** hostels.

Experience and Leadership

Vice President, Institute Development Society (IDS), VNIT   *Aug 2025 – Present*
Student Mentor, Student Mentor Programme (SMP), VNIT   *Apr 2025 – Present*
General Secretary, V.G.Bhide Boys Hostel, Hostel Section, VNIT   *Aug 2024 – Aug 2025*
Technical Secretary, J.C.Bose Boys Hostel, Hostel Section, VNIT   *Aug 2023 – Aug 2024*