Ashutosh Tripathi

ashutosh1008c@gmail.com | (+91) - 7020060607 | GitHub: AT010303 | LinkedIn: at010303

EDUCATION

Bachelor of Technology in Computer Science and Engineering (Specialization in AIML)

SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT — Nagpur, Maharashtra, India | Dec 2021 - Jun 2025

- CGPA: 8.07/10 (Till 6th SEM)
- Relevant Coursework: Data Structures and Algorithms, Digital Electronics, Computer Architecture, Operating System, Computer Networks, Theory of computation, Object Oriented Programming, Database Management Systems (SQL), Microcontroller Design, Compiler Design, Deep Learning, Digital Image Processing, Natural Language Processing, Data Mining and Warehousing.

SKILLS

Languages	C, C++, JavaScript, Typescript, Python, SQL, HTML5, CSS3
Library/Framework	Node.js, React.js, Next.js, three.js, React three fiber (R3f), Webpack, Vite, GSAP, Zustand Tailwind CSS, Prismic
Tools/Platforms	Git, GitHub, Blender, Adobe Photoshop, Adobe Illustrator, Figma, AWS

PROJECTS

3D Interactive Portfolio Website

- **Creator and Sole Developer:** Currently building a portfolio website using **React, Zustand, R3f, React drei, three.js, Vite, GLSL, GSAP, Blender** and deployed on **Vercel**.
- Demonstrates expertise in 3D web development, UI/UX design, and deployment.
- **GitHub** (https://github.com/AT010303/Room_Portfolio)
- Check out the initial version at **"room-portfolio-ten.vercel.app"**.

GALAXY-ANIMATION

- Leveraged **WebGL** and **GLSL** to create visually stunning galaxy visualization resulting in a 50% increase in user engagement.
- Employed advanced particle shaders in **GLSL** to generate patterns of stars, resulting in a lifelike galaxy simulation and 40% improved performance.
- Key technologies incorporated **three.js, GLSL, HTML, CSS, JavaScript and Webpack.**
- **GitHub** (https://github.com/AT010303/galaxy-animation)

LDM for Anime Image Generation using LoRA

- Developed **LoRA Model**, for the **Stable Diffusion**, to generate anime/cartoon-style images from text prompts, enhancing accuracy and acting as an adapter for improved image generation.
- Efficient to train, requiring less computational power up to **70%** and capable of training on smaller datasets which reduces the training time by **80%.**
- Co-authored a **research paper** for this project, selected for an **international conference** on Advanced Communication, Energy and Big Data (**ICACEBD-2024**) which will be published in **SCOPUS** journal.
- Actively enhancing the performance of image generation using **Latent Consistency Models (LCM)** to reduce the number of steps and targeting **85%** reduction in overall generation time.

Graphics Work | **Drive**

ACHIEVEMENTS

- **LEETCODE:** Solved **400+** questions with Peak rating of **1500+**. |
- CODECHEF: 3 Star Coder with max rating of **1600+** | Solved **100+** questions |
- **1650+** Peak Rating on Chess.com | (ID: Ash_0001)