Priyansh Khajuria

New Delhi, India

📞 +91-9315654676   ✉ priyanshkh14@gmail.com   in linkedIn   ⚪ github   🌐 portfolio

Education

Jaypee Institute of Information Technology   Noida, Uttar Pradesh
B.Tech in Computer Science and Engineering   August 2021 – May 2025

Acheivements: Secured 2nd position in the IIIT-Delhi E-Summit Social Impact Ideathon (2023), Awarded for excellence in Data Science Mastercourse, Actively participated in multiple inter-college hackathons.

Experience

Undergraduate Research Intern   June 2024 – August 2025
Jaypee Institute of Information Technology   *Noida, Uttar Pradesh*

- Created deep learning pipelines using CNN architectures (e.g., DenseNet), integrating CUDA-based parallel programming to automate mammographic image analysis with 95%+ accuracy, achieving state-of-the-art performance.
- Utilized the CBIS-DDSM dataset comprising over 3,000 mammogram images to train and validate models for early-stage breast cancer detection, improving diagnostic accuracy by 12% compared to baseline methods.
- Deployed experiments on local GPUs (2× NVIDIA T4) and HPC environments (8× NVIDIA A100 GPUs, 576 CPU cores, 4.5 TB RAM), optimizing throughput and reducing training time by 40% via parallel processing.
- Engineered scalable machine learning workflows optimized for high-performance computing clusters and large-scale data pipelines, processing datasets exceeding 100 GB efficiently.

Teaching Assistant   September 2023 – March 2024
Coding Blocks   *New Delhi*

- Delivered Data Structures and Algorithms (DSA) lectures to 200+ students through both online and offline modes, fostering an interactive and engaging learning environment.
- Curated and built 100+ DSA worksheets, quizzes, and coding challenges to strengthen students conceptual clarity and hands-on skills.
- Cultivated an engaging learning environment by creating and leading 10+ interactive sessions per week.

Projects

Barks & Whiskers: Pet Adoption and Rehome Website ↗ | *MERN Stack, Firebase, OAuth*   March 2024

- Developed a full-stack web application for pet adoption and rehoming, improving search efficiency by 65%.
- Implemented advanced search filters and matching logic, reducing irrelevant pet matches by 40%.
- Integrated Google OAuth and Firebase for secure, real-time authentication and data handling.
- Enhanced UI/UX using Tailwind CSS and responsive React components, boosting accessibility across devices.

AI Image Generator ↗ | *React.js, Express.js, OpenAI DALLE, Material UI*   May 2025

- Engineered a web-based GenAI tool to generate images from text prompts under 3s generation time per image.
- Implemented dark mode UI with Tailwind CSS and Material UI, enhancing user interaction and visual clarity.
- Added community sharing and download functionality; improved user retention by 50%.

Audio Sign-to-Speech ↗ | *JavaScript, Web Speech API, Python, NLTK, Blender*   January 2025

- Built an end-to-end translator converting live audio/text to animated Sign Language using a 3D avatar.
- Enabled multilingual support across 5+ Indian languages via Google Translate's Speech-to-Text API.
- Achieved 90%+ recognition accuracy in noisy environments using preprocessing with NLTK.
- Used Web Speech API for browser-native real-time speech recognition with sub-second response.

Technical Skills

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS
Frameworks: React, Next.js, Node.js, Express.js, WordPress, Material-UI, TailwindCSS, FastAPI, RestAPI
Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, Redis, MongoDB
Libraries: Pandas, NumPy, Matplotlib, SQL
Certifications: Agile Project Management (Google), Data Science Master Course (Coding Blocks), Bits and Bytes of Computer Networking (Google)