

VISHAL SINGH

Software Developer | ML Engineer

+91-7737648088 | connectvishalsingh27@gmail.com | Meerut, India | vishal04singh.site
linkedin.com/in/vishal-04-singh | github.com/vishal-04-singh

SUMMARY

MCA (AI and ML) student with full-stack development experience in React, TypeScript, Node.js, Express, and MongoDB. Proficient in building REST APIs and implementing JWT authentication. Hands-on experience in Machine Learning, Deep Learning, and Computer Vision. Seeking an entry-level Software Developer or ML Engineer role.

EDUCATION

- UNIVERSITY OF PETROLEUM AND ENERGY STUDIES - Uttarakhand** Jul 2025 - Pursuing
Master of Computer Application (*Specialization: Artificial Intelligence and Machine Learning*)
SGPA: 7.9
- KURUKSHETRA UNIVERSITY - Haryana** Sep 2020 - Sep 2023
Bachelor of Computer Application
CGPA: 6.4

SKILLS

- Languages:** Python, C++, C, JavaScript, Java, TypeScript, HTML, CSS
- Frameworks and Libraries:** React.js, React Native, Node.js, Next.js, Express.js, Bootstrap 5, Framer Motion, GSAP, PyTorch, scikit-learn
- AI and ML:** Deep Learning, Computer Vision, Metric Learning, EfficientNet-B0, ArcFace Loss, TTA, Cosine Similarity
- Databases and Tools:** MySQL, MongoDB, Git, GitHub, Vercel, Cloudinary, Postman, Figma, VS Code, Expo CLI

PROJECTS

- Jaguar Re-Identification - Kaggle Competition (Deep Learning / Computer Vision)** Mar 2026
Tools: Python, PyTorch, EfficientNet-B0, ArcFace Loss, scikit-learn, Pillow, tqdm
kaggle.com/competitions/jaguar-re-id **Public Score: 0.757 mAP | Rank #234**
 - Built an EfficientNet-B0 and ArcFace deep metric learning pipeline to re-identify 31 individual jaguars from 1,896 training images, achieving 0.757 mAP (rank 234 out of 300+ teams).
 - Engineered class-balanced training using WeightedRandomSampler and data augmentation (random crop, flip, color jitter, random erasing) to handle extreme class imbalance (13-183 images per identity).
 - Deployed Test-Time Augmentation (TTA) and cosine similarity scoring to generate 137,270 pairwise predictions evaluated via identity-balanced mAP.
- IntelAi Website (Full-Stack / Frontend)** Jan 2026
Tools: Next.js 14, React 18, TypeScript, Tailwind CSS, Framer Motion, GSAP, Radix UI, React Hook Form
intelaidata.com
 - Architected a high-performance marketing website using Next.js 14 App Router with SSR and SSG for fast page loads and SEO-friendly rendering for an AI products company.
 - Implemented rich UI animations using Framer Motion and GSAP (scroll-triggered reveals, logo marquees, interactive steppers) with accessible Radix UI components.
 - Integrated React Hook Form and Formspreet contact form, and added dark and light theme switching via next-themes with full mobile-responsive design.
- Football Tournament Management System (Full-Stack)** Jun 2025
Tools: React Native (Expo), TypeScript, Node.js, Express.js, MongoDB, JWT, bcrypt, Cloudinary, Helmet
github.com/vishal-04-singh/football-app-FD | football-app-BD
 - Built a cross-platform mobile app (React Native and TypeScript) with 20+ reusable components for real-time tournament management, live match scoring, and multi-device synchronization.
 - Engineered a RESTful backend API (Node.js, Express, MongoDB) with role-based access control, JWT authentication, bcrypt password hashing, and Cloudinary image uploads.
 - Improved API performance by 30 percent through MongoDB query optimization, rate limiting, Helmet security headers, and CORS configuration.

WORK EXPERIENCE

- Arcdata Technology - Bhiwadi (Raj), India** Aug 2023 - Jul 2024
Frontend Developer Intern
 - Built 3+ responsive web interfaces for an AI data annotation platform using React.js and JavaScript, translating Figma wireframes into cross-browser UI.
 - Improved page load performance via asset optimization, lazy loading, and CSS refactoring across all major browsers.
 - Managed source code with Git and GitHub following branching strategies and collaborative code review practices.

CERTIFICATIONS

- OCI AI Foundations Associate** Nov 2025
- Introduction to Node.js (LFW111)** May 2025
- C++ Problem Solving (Pro)** Oct 2023