Ankit Vishwakarma

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linkedin.com/in/ankit-vishwakarma-6531221b0 | Portfolio: https://ankithub.vercel.app/

SUMMARY

Full Stack Software Engineer with **3+ years** of experience taking web and mobile products from architecture to release across e-commerce, inventory, finance, and video systems. At **MInSysT Consulting**, lead full-stack development (frontend, backend, and **Flutter** for **iOS** and **Android**), manage a team, drive architecture decisions, and oversee **TestFlight** testing. Built **I2OC** and **I2OC Gold**, the company's main inventory products, on **Vue.js** with a **single-codebase architecture**, running global on the platform or local on a client's own server with **Docker**. Delivered finance features that improved reporting accuracy for **500+ users** and portals for a drone services platform that reduced booking time by **25%** for **1,000+ users**. Engineered a custom CCTV **NVR** pipeline on **FFmpeg**, **RTSP**, **PostgreSQL**, and the **Google Drive API**. Core stack: **React.js, Next.js, Node.js, Express.js, TypeScript, PostgreSQL, MongoDB, MySQL, RESTful APIs, AWS** (EC2, S3, Lambda, load balancing), **Cloudflare, DigitalOcean**, and **CI/CD** with **Fastlane**. Expertise in **3D website design** with **Three.js** and **React Three Fiber**. Develops with **Claude**, Cursor, and **MCP tools**, and uses **agentic AI workflows** for automation.

EXPERIENCE

Software Developer

MInSysT Consulting Pvt Ltd **July 2024 - Present, Mumbai, India**

- **Leadership:** Lead frontend, backend, and **Flutter** (iOS and Android) development and manage a team. Drive architecture decisions, oversee **TestFlight** testing, and work with designers, product managers, and QA.
- **Product architecture:** Built **I2OC** and **I2OC Gold**, MInSysT's main inventory systems, on **Vue.js** with a **single-codebase architecture**. Each product carries its own bundle app: **mShop** on I2OC and **AU Silver** on I2OC Gold.
- **Deployment model:** Delivered two runtime options once a client picks I2OC or I2OC Gold: global on the platform, or local on the client's own server, with the product and database shipped using **Docker** under a license.
- **Provisioning:** Automated website provisioning from company data, so a new brand goes live on a subdomain (such as yourbrand.i2ocgold.com) or its own domain, with a **payment gateway**, inventory, and an **admin panel** for products, sales, and analytics. Website within 2 days, app on Google Play and the App Store within 2 weeks (timelines may differ).
- **Inventory and operations:** Implemented real-time stock levels across stores, retail shops, and godowns, with inter-warehouse transfer, invoicing, and reports on I2OC, and real-time inventory across warehouses, retail stores, and online channels on I2OC Gold. Both products cover purchase and sales management, employee roles, and sub-users.
- **Commerce:** Built I2OC Gold for jewellery brands: an **e-commerce** website and mobile app with order tracking and a payment gateway, a customer login portal, customer profiles, vendor management, and analytics on total sales and top items.
- **Multi-tenant mobile:** Architected AU Silver, I2OC Gold's bundle app, as a **multi-tenant e-commerce platform**: one **Flutter** codebase produces per-client iOS and Android apps, with unique iOS bundle IDs and Android application IDs, **Kotlin** for dynamic configuration, and **Git branching** for client-specific instances.
- **Storefront and backend:** Led AU Silver's **Next.js** storefront and its **Node.js**, **Express.js**, and **PostgreSQL** backend, deployed on **AWS** with load balancing.

- **Finance app:** Built XCIBIL's finance features, including GST compliance and loan tracking, on a **Flutter** client (iOS and Android) and a **Node.js**, **Express.js**, and **PostgreSQL** backend. Modules cover GST verification, return tracking, turnover analysis, loan tracking, and supplier and customer insights.
- **Integrations:** Integrated **Tally ERP** through **XML-over-HTTP** and automated GST reminders on **OAuth-based APIs**. These features improved financial reporting accuracy for **500+ users**.
- **Backend:** Designed **RESTful APIs** and secure authentication, and built backends on **Node.js**, **Express.js**, and **PostgreSQL**.
- **Delivery:** Automated iOS **TestFlight** and production builds through **CI/CD** with **Fastlane**, with automated Google Play and App Store deployment workflows. Used **Xcode** for all iOS apps, integrated SDKs in the Flutter apps, and ran go-live scheduling and publishing through Google Play Console and the App Store.
- **Infrastructure:** Deployed on **AWS** with **load balancing**, optimizing storage, networking, and compute for scalability and fault tolerance.
- **Quality:** Conducted testing, debugging, and performance tuning to keep applications secure and stable.
- Project Links: I2OC | I2OC Gold | AU Silver | AU Silver App | XCIBIL App

Junior Software Engineer

Aerial Borne **September 2023 - May 2024, Jaipur, Rajasthan, India (Remote)**

- **Platform:** Built the three applications of a **multi-role drone services platform**: customer portal, pilot portal, and admin panel, with secure access control and scalable backend logic across roles.
- **Customer portal:** Built a responsive frontend on **React.js** and **Tailwind CSS** for browsing services, viewing multimedia portfolios, and booking, with integrated payments over **RESTful APIs**.
- **Pilot portal:** Implemented **JWT-based authentication**, service registration, KYC verification, and media uploads to **AWS S3**.
- **Admin panel:** Engineered user, service, and KYC workflows on **Node.js**, **Express.js**, and **MySQL**, with a schema designed for strong data integrity.
- **Performance:** Implemented lazy loading and caching for multimedia management.
- **Delivery:** Deployed on **AWS** through **CI/CD pipelines** at **99.9% uptime**, with **Git** version control and **Agile** workflows.
- **Impact:** Reduced drone booking time by **25%** for **1,000+ users**.
- Project Link: Aerial Borne Website

Code Debugger and Teaching Assistant (Intern)

Coding Ninjas **June 2023 - September 2023, New Delhi, India (Remote)**

- **Code review:** Reviewed and debugged code for almost **700 students** learning full-stack web development, providing solutions and instruction on their projects.
- **Stack:** Debugged frontend code (**HTML, CSS, JavaScript, jQuery, AJAX**) and backend code (**Node.js, Express.js, MongoDB**, API development).
- **Tooling:** Guided students on **Git** version control and application hosting.

PROJECTS

Custom NVR-Based CCTV Cloud Storage and AI-Driven Automation System (Google Drive Integration)

- **System:** Engineered custom **NVR (Network Video Recorder)** software that the user installs on an old laptop and connects to the camera, with no vendor-specific NVR system in the chain. Its core value is free cloud storage for continuous footage.
- **Capture:** Captured footage from IP cameras with **FFmpeg** over **RTSP** and **HLS**, with FFmpeg handling real-time stream processing, segmentation, and compression. The footage and the backend sit on the laptop's own drive.
- **Metadata:** Tracked video segments in **PostgreSQL**. Uploads take their order from that metadata and retries start from it, which enables failure recovery and keeps data consistent across interruptions.
- **Upload pipeline:** Built a cloud video ingestion pipeline that sends the same data in sequence through the **Google Drive API**, with scheduling, retry logic, and failure handling.
- **Storage:** Merged **2 or 3 Google accounts** into one large pool of free cloud storage, reducing dependency on vendor-specific storage.
- **Frontend:** Built a **Next.js** frontend that shows all footage and its timeline, from cloud or local, whenever the user wants.
- **Failure model:** If anything happens to the local drive, the footage that reached Google Drive is safe.
- **Networking:** Applied bandwidth optimization and latency handling on the IP camera streams for stable, efficient data transfer.
- **Tooling:** Used **generative AI tools** to accelerate debugging, reverse-engineering of APIs, and system optimization.

Amour Home Salon

Freelance • amourhomesalon.in/ • December 2023 - February 2024

- **System:** Built and deployed, in a team of 2, a full-stack time-slot booking platform for a home salon on **Next.js**, **Node.js**, **Express.js**, and **MongoDB**, hosted on **DigitalOcean**.
- **Frontend:** Built a responsive **Next.js** UI for exploring services and booking time slots, with dynamic banners.
- **Pricing and data:** Implemented dynamic pricing rules that resolve by service area, modeled categories, services, orders, payments, and coupon codes in **MongoDB**, and optimized backend performance and database queries for booking and order tracking.
- **Admin:** Built the admin panel for categories, services, orders, payments, and coupons.
- **Notifications:** Engineered a notification system that automates booking confirmations, reminders, and status updates.
- **Impact:** Grew customer acquisition by **40%** and increased website traffic.

3D Portfolio Website

ankithub.vercel.app/

- **System:** Designed and built a scroll-driven **3D website** on **Next.js**, with WebGL scenes written in **Three.js** and **React Three Fiber**.
- **Scenes:** Built a 3D skill stack and two scroll-driven walkthroughs, one of I2OC and one of the CCTV pipeline.
- **Performance:** The scenes run on phones, with quality that steps down on slow devices and a version without 3D for the rest.

SKILLS

Programming & Data Structures: Java, JavaScript (ES6+), TypeScript, Dart, Kotlin

Frontend: React.js, Next.js, Vue.js, Three.js, React Three Fiber, WebGL, 3D Website Design, HTML5, CSS3, Tailwind CSS, shadcn/ui, jQuery, AJAX

Backend: Node.js, Express.js, RESTful API Design and Development, REST APIs, API Integrations, XML-over-HTTP, Authentication and Authorization (JWT, OAuth), Background Processing, Automated Workflows, Business Logic

Databases: PostgreSQL, MySQL, MongoDB, Database Schema Design, Data Modeling, Query Optimization, Application Data Management

App Development: Flutter, Xcode, TestFlight, Fastlane, Cross-Platform iOS and Android, Native Mobile App Integration, SDK Integrations, Mobile Deployment and Release Management, Google Play Console, App Store

Cloud & DevOps: Amazon Web Services (AWS EC2, AWS S3, AWS Lambda, AWS ECS, Load Balancing), Cloudflare, DigitalOcean, Docker, Docker Desktop, CI/CD Pipelines and Automation, Application Deployment and Infrastructure Management

Video & Streaming: RTSP, RTMP, ONVIF, HLS, HLS.js, FFmpeg, Fluent-ffmpeg, Google Drive API, Video Transcoding, Video Segmentation and Compression, Live Video Streaming, CCTV Integrations, Automated Video Ingestion, Cloud Video Storage

Architecture & Engineering: Full-Stack Application Architecture, Multi-Tenant SaaS and Application Architecture, Single-Codebase Architecture, Cross-Platform Application Architecture, Scalable Backend Design, System Integration, Performance Optimization, Technical Leadership, Team Management, End-to-End Product Development

UI/UX & Tools: Figma, Adobe XD (UI Design and Prototyping), Git, GitHub, Postman, Visual Studio Code

AI & Tools: Claude, Claude Code, Cursor AI, ChatGPT, Gemini, Ollama, n8n, MCP Tools (Model Context Protocol), Agentic AI Workflows, AI-Assisted Development Workflows, AI Coding Assistants, Generative AI Integration, AI-Powered Application Features, API-Driven Automation

Business Domains: E-commerce Platforms, Inventory Management, GST-Compliant Finance Applications, Tally ERP Integrations, Drone Service Booking Platforms, CCTV Cloud Storage and Automation, Mobile Application Development, AI-Integrated Applications

EDUCATION

Bachelor of Science in Information Technology

Thakur College of Science and Commerce (TCSC), University of Mumbai • Mumbai, India • 2022 • 8.38 CGPA

CERTIFICATIONS

Front End Web Development

Coding Ninjas • 2023

- https://ninjasfiles.s3.amazonaws.com/certificate28018560cc6531cbad5885c6b648515b264c4b9.pdf

Back End Web Development

Coding Ninjas • 2023

- https://ninjasfiles.s3.amazonaws.com/certificate2801859af487fc7727fb8d67e940ffd724ac007.pdf

Data Structures and Algorithms

Coding Ninjas • 2023

- https://ninjasfiles.s3.amazonaws.com/certificate28018542a351853d6ee9cf6ba89295452e513ab.pdf