

KOLASS REXON J

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Upwork:<https://www.upwork.com/freelancers/~011cd9c42be70adbe7> , PortFolio: kolassrexon.in

PROFESSIONAL SUMMARY

Full-Stack AI/ML & Web and App Engineer focused on merging modern web frameworks (**Next.js, Astro, Django**) with advanced AI capabilities. Deep expertise in backend architecture using **Django** and **Node.js**, alongside cross-platform mobile development in **Flutter**. Proven ability to design and deploy custom **AI Agents** using **LangChain** for complex workflows. highly rated freelancer on Upwork known for delivering secure, production-ready applications.

EDUCATION

B.E - Computer Science Engineering (2022-2026)

R.V.S College of Engineering, Dindigul.

CGPA: 8.15 | 4th Year (Pursuing)

Higher Secondary Education HSC:72%

RC.Hr.Sec.School,Silukuvarpatty,Dindigul SSLC:90%

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, TypeScript, Dart
 - **AI & GenAI:** LangChain, RAG Implementation, AI Agent Development, AI Automation
 - **Frontend:** NextJS, Astro, Flutter
 - **Backend:** NodeJS, Django REST Framework
 - **Databases:** MySQL,PostgreSQL, MongoDB, Redis
 - **Cloud & DevOps:** AWS, GCP, Azure Docker, Jenkins, GitHub Actions, CI/CD, Git
 - **BaaS:** Firebase, Supabase
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EXPERIENCE

Full Stack Intern (JUN 2024 - NOV 2025)

Merzol Technologies, Dindigul

- Develop and maintain responsive, high-performance front-end components for client web applications using **React.js and modern JavaScript frameworks**.
- Assisted in developing and debugging features for a large-scale web application, contributing Full Frontend Development for **Merzol AI Video Search Project**
- Design, build, and integrate **scalable back-end services and RESTful APIs** to support complex application functionality for the project of **Merzol schools**
- Implemented on-page and **technical SEO** and Proper frontend logics and improved user experience

Full Stack Freelancer (DEC 2024 - PRESENT)

Upwork Platform, remote | 1 Year 3 Months

- Successfully delivered **22+ projects** across **3 core International contracts**, maintaining a **100% Job Success Score** over **800+ logged hours**.
- Engineered and deployed custom AI-powered automation solutions and business AI agents to streamline client operations and enhance productivity.
- Balanced a top-rated freelance workload alongside full-time academic commitments.

PROJECTS

PrepMyExam (my first own SaaS product platform)

NextJS | Firebase | Gemini

- **PrepmyExam** is a modern, comprehensive web application designed to help aspirants prepare for Indian competitive exams
- **Real Exam Interface:** Practice environment mimicking actual exam interfaces (Timer, Question Palette, Mark for Review).
- **AI-Powered Prompt Creator:** Generate custom study prompts and question sets for specific exams (IBPS, SSC CGL, UPSC) using advanced AI integration.
- **Detailed Analytics:** Track performance with "Overall Score" and "Total Attempts" metrics.
- **Review System:** Comprehensive post-exam analysis to identify weak areas.
- **Live URL :** www.prepmyexam.in

Merzol AI Video Analytics tool

Merzol Project | Firebase | ReactJS | Django REST Framework | NLP

- **Merzol AI Video Analytics tool** is a modern, interactive web application designed to help analyze the video, search content inside the video
- **Video Intelligence Pipeline:** Engineered a video processing engine that automates **Speech-to-Text transcription** and multi-language support using advanced NLP models.
- **Semantic Search & Navigation:** Implemented **timestamped video search**, allowing users to query spoken content and instantly navigate to specific moments using keyword highlighting.
- **RAG-Based AI Assistant:** Integrated a **Context-Aware Chatbot** and **Smart Summarization** module (RAG) to answer user questions based on video content and extract key takeaways.

Secure Blockchain File Sharing

NextJS | Solidity | Hardhat | RainbowKit | Wagmi

- Architected a **Zero-Knowledge** file sharing DApp using **IPFS** for decentralized storage and **Ethereum** smart contracts for immutable access control.
- Implemented **End-to-End Encryption (AES-256-GCM)** with **PBKDF2** key derivation, ensuring data is encrypted client-side before upload.
- Developed custom **Solidity Smart Contracts** (v0.8.24) deployed via **Hardhat** to manage permissioned file sharing between wallet addresses without centralized intermediaries.
- Integrated **RainbowKit** and **Wagmi** for secure, passwordless authentication via MetaMask and other Ethereum wallets.
- **Repo URL :** github.com/Kolass2004/Secure-files-sharing-using-block-chain

CRISPR-AI: Genetic Repair Prediction System (Final Year Project)

ReactJS | NodeJS | TensorFlow | Custom trained AI Model | Python

- Engineered a **Deep Learning model** trained on genomic datasets to simulate CRISPR gene repair, predicting optimal DNA sequences from 1,000+ variants.
- Architected the **Backend System** to function as a "Digital Twin," reducing theoretical validation timelines by **95% (18 months to weeks)** through in-silico simulation.
- Developed the **AI Analysis Engine** that ranks the top 10 repair candidates based on safety scores
- Integrated a custom **Neural Network** with a React frontend to visualize molecular repair outcomes and implementation guidance
- **Repo URL :** github.com/Kolass2004/helix-dna-forge

