

WORK PROJECTS

HugoAssist

- Led a technical team of 3, building AI-driven business development platform, HugoAssist, especially catered to the Norwegian market.
- Implemented asynchronous task handling with **Celery** and **RabbitMQ** to ensure scalability and reliability
- Managed end-to-end **Azure** deployment, including setting up **CI/CD** pipelines for streamlined production workflows
- Built a scalable backend in Django, following MVC architecture to support robust business logic and integrations
- Played a client-facing role, gathering requirements, providing updates, and ensuring alignment with client expectations
- Developed a high-performance frontend using Next.js, including dynamic chat interfaces and complex UI logic

LikhitNepal

- Built an Open Source Nepal driving license exam prep platform and resource hub.
- Utilized NextJs and Tailwind for appealing frontend and responsiveness across devices. Integrated map navigation, test review systems, and color blind testing. Integrated dynamic and expandable global state creation using zustand.
- Optimized TTI by 30% using Zustand global state management. Reduced LCP by 20% using lazy load and SSR.
- Live: <https://likhitnepal.com>

TicketShack

- Employed Zustand for robust global state management. Implemented efficient SSR and CSR.
- Engineered NestJS APIs. Reduced response time by 30%. Reduced CLS by 40%
- Optimized frontend to figma accurate design using NextJs and tailwind. Ensured responsiveness across devices
- Integrated Tanstack Query. Reduced redundant calls by 60% and server load by 30%
- Live: <https://staging.ticketshack.co.uk/>

BookToks

- Building a cross-platform mobile applications using Expo React Native, ensuring seamless performance on Android and iOS.
- Developed efficient REST APIs with Django and Django Ninja, integrating PostgreSQL and Supabase for scalable and secure backend solutions.
- Streamlined state management with Redux Toolkit and RTK Query, reducing API call redundancy by 40% and improving data synchronization. Implemented clean and reusable components and modals, hooked them with efficient state logic.

PERSONAL/TEAM PROJECTS

Bhanu

- Built Bhanu, an AI powered Nepali folk story-recitation web app and bot.
- Utilized Nextjs and tailwind. Optimized responsiveness and UX/UI
- Collected 3400+ folk stories via surveys and web-scraping. Fine-tuned Google Gemini. 600+ users monthly
- Live: <https://bhanuai.vercel.app/>

Zappi | *Kafka, NodeJS, NextJS, TurboRepo, Typescript, Prisma*

- Developed an automation tool like zapier using Turbo Repo for efficient monorepo management
- Implemented real-time event streaming with Kafka to ensure seamless data flow. Engineered API integrations using webhooks for smooth automation workflows
- Built backend services in Node.js with Prisma ORM for streamlined data modeling. Utilized PostgreSQL as the database for scalable and efficient data management
- Github: <https://github.com/aaakash06/zappi>

Ask Things | *NextJS, Tailwind, ShadCN, ClerkAuth, MongoDB, Python, Typescript*

- Built a Next.js-powered social platform. Developed around 13,000 lines of code using reusable components for scalability and maintainability
- Leveraged MongoDB for efficient data management, and integrated Clerk-Auth for secure user authentication. Utilized ShadCN and other tools to enhance UI/UX and streamline development.
- Github: <https://github.com/aaakash06/GuidanceConnect>
- Live: <http://askthings.vercel.app/>

CodeGaurdian | *SonarQube, NextJS, PostgreSQL, Docker, Python, NodeJS, Git*

- Developed a tool to monitor and flag declining code quality in open-source repositories.
- Integrated SonarQube to analyze code quality, identifying bugs, and code complexity. Stored data in PostgreSQL for historical trend analysis and reporting.
- Built robust APIs in Node.js. Automated repository initialization with Python and Git scripting
- Github: <https://github.com/aaakash06/CodeGaurdian>

Guidance Connect

- Developed a web-based mentorship platform using Next.js for a dynamic, server-rendered frontend.
- Utilized MongoDB as the database to manage user profiles, sessions, and facilitator data.
- Implemented Clerk for secure user authentication. Integrated Shadcn UI components. Integrated Calendly for robust meeting scheduling.
- Created a recommendation system using K-Nearest Neighbors (KNN) algorithm to match students with relevant facilitators based on preferences.
- Deployed the docker image using render.
- Github: <https://github.com/aaakash06/GuidanceConnect>
- Live: <http://guidanceconnect.vercel.app>

MultiClock

- Built a productivity app that lets you run multiple timers. Used NextJS for frontend.
- Integrated Framer Motion for creating smooth, responsive animations and transitions.
- Utilized zustand for global state management. Handled rehydration, local persist, and data optimization.
- Live: <http://multiclock.vercel.app>

3WEB

- Built a web3 wallet generator for Ethereum and Solana blockchains using Next.js for the frontend.
- Integrated Framer Motion for creating smooth, responsive animations and transitions.
- Ensured secure wallet generation and compatibility with Ethereum and Solana ecosystems.
- Github: <https://github.com/aaakash06/3web>
- Live: <http://3web-two.vercel.app>

VGO-Certify

- Developed an automated certification distribution web app for an NGO, Vision Green Organization.
- Utilized streamlite for frontend and hosting. Used openCV and Pillow python library for image manipulation.
- Github: <https://github.com/aaakash06/vgo-certify>
- Live: <https://vgo-certify.streamlit.app/>

Hamro Chess | *ReactJS, NodeJS, TypeScript, Tailwind, WebSockets*

- A React and Node.js multiplayer chess platform. Used native websockets for real time communication.
- Github: <https://github.com/aaakash06/hamro-chess>
- Live: <https://hamro-chess.vercel.app/>

Foodier | *CNN, Tensorflow, Python, Colab*

- Built and trained a Food image Classifier using Deep Learning Convolution Neural Networks(CNN) in Tensorflow
- Used transfer learning and fine-tuned the EfficientNet model on 101 classes of food items
- Github: <https://github.com/aaakash06/Foodier>

Diapred | *SVM, Scikit-learn, Python, Colab*

- Built and trained a Diabetes prediction ML model using SVC (Support Vector Classifier) in scikit learn.
- Used kaggle dataset of 100,000 plus record size. Ran data cleaning, preprocessing, and EDA. Achieved an accuracy score of 96% on the test set.
- Github: <https://github.com/aaakash06/diapred>
- Live: <https://diapred.streamlit.app/>

Cogent

- Developed a full-stack blog posting web app using Next.js for frontend and backend functionality.
- Integrated MongoDB for efficient data storage and management. Utilized Clerk for seamless user authentication and management.
- Implemented Firebase Storage to store and manage image uploads.
- Github: <https://github.com/aaakash06/cogent>
- Live: <http://cogentt.vercel.app>

SYC

- Built a landing page for a Non profit organization, Sound Youth Circle.
- Employed Next.js for frontend. Integrated a chatbot using Gemini API.
- Github: <https://github.com/aaakash06/syc>
- Live: <https://soundyouthcircle.vercel.app/>

MSWriter

- Built a script that takes the MCQ type question data json from an api call to write a MS word Question Paper file.
- Github: <https://github.com/aaakash06/mswriterc>

RTCall

- Implemented real time video and audio calling feature using native web-RTC technology
- Used socket.io for efficient room creation.
- Github: <https://github.com/aaakash06/RTC-call>

TikTokShop

- Developed a real-time notification system for TikTok Shop to enhance user engagement by delivering instant updates on new content.
- Utilized Golang for backend development, ensuring efficient handling of notifications and data processing.
- Built a TypeScript frontend to seamlessly integrate real-time notifications for users.
- Implemented Redis for real-time data streaming and MySQL for structured content storage.
- Github: https://github.com/Ameer-Hamza289/Notification_system