Aayush Timalsina

Full Stack Developer

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PROFILE

Full Stack Developer with 2+ years of hands-on software development experience building scalable web applications using Python, JavaScript, TypeScript, React, Node.js, FastAPI, and Django. Experienced in developing responsive frontend applications, RESTful APIs, real-time systems, authentication and authorization workflows, and SQL-backed applications. Hands-on experience optimizing database performance by eliminating N+1 query patterns, improving complex filtering workflows, and implementing Redis caching to reduce redundant database operations. Experienced with multi-tenant architectures, CI/CD pipelines, Git-based development workflows, and third-party integrations. Strong understanding of application performance, database design, API architecture, and end-to-end feature development.

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, C#

Backend: FastAPI, Django(Primary), ASP.NET Core, REST API Design, PostgreSQL, SQL Server, JWT/OAuth2

Frontend: React.js, HTML5, CSS3, Tailwind CSS

AI & ML: Computer Vision, LLMs, NLP, HuggingFace, PyTorch, ONNX Runtime, ArcFace, YOLO, FAISS, HDBSCAN, OpenCV, Langchain

Cloud/Deployment: Azure, Firebase (Basic), Vercel, Railway, Render, Cloud Storage (S3-compatible workflows)

PROFESSIONAL EXPERIENCE

Full Stack Developer | Voxcrow Pvt.Ltd, 2025 – Present
VoxCrow Pvt. Ltd. | Buel Bucket & Global Admin Kathmandu, Nepal

- Developed and maintained Bucket, a multi-tenant omnichannel customer-support platform, contributing across responsive frontend interfaces, REST APIs, backend business logic, real-time communication, and database layers.
- Optimized complex ticket filtering and data-fetching workflows by identifying and eliminating N+1 query patterns, reducing unnecessary database round trips and improving filtering and API responsiveness.
- Implemented Redis caching for frequently accessed application data to minimize repeated database operations and improve backend response performance.
- Built reusable React and TypeScript interfaces using TanStack Query, Zustand, Tailwind CSS, and Radix UI, implementing server-state caching, targeted query invalidation, tenant-aware data fetching, and real-time UI synchronization.
- Developed secure RESTful APIs and real-time workflows using Node.js, Express, TypeORM, MySQL, JWT/OAuth authentication, tenant-aware authorization, database transactions, migrations, and Socket.IO.
- Integrated external communication services including Microsoft Outlook/Graph API, IMAP/SMTP email, WhatsApp, webhooks, and telephony services, handling authentication, message processing, connection lifecycle, and real-time application updates.
- Contributed to CI/CD and Git-based development workflows, including code-quality checks, builds, migration management, deployment validation, and troubleshooting application and pipeline issues.

Full Stack Developer | BlueNeon Tech, 2024 – 2025
BlueNeon Tech | Fotosfolio.com & Sawraiexpert.com Bhaktapur, Nepal

- Developed and maintained full-stack web applications using Python, FastAPI/Django, React, JavaScript, and PostgreSQL, contributing across frontend functionality, REST APIs, backend services, database design, and application integrations.
- Designed modular and scalable RESTful API architectures using Python frameworks, enabling reusable backend services and seamless communication between frontend applications and server-side functionality.
- Built and optimized data-intensive backend workflows using efficient query design, indexing, normalized data models, and API-level caching to reduce redundant database operations and improve application performance.
- Engineered high-performance AI and vector-search services using ONNX Runtime and FAISS, achieving sub-10ms similarity lookups across thousands of embeddings for real-time search and matching workflows.
- Optimized compute-intensive embedding pipelines through batch processing and efficient resource utilization, achieving approximately 35% higher processing throughput.
- Developed React functionality and integrated frontend applications with backend REST APIs, handling asynchronous data flows, application state, loading states, error handling, and user-facing workflows.
- Implemented secure application workflows using JWT/OAuth2 authentication, API validation, structured database access, and scalable backend architecture.

RELEVANT PROJECTS

ChatDjango | Django, Channels, WebSockets, Redis, DRF, React, PostgreSQL , *GitHub*
- Real-time chat application with Django Channels for bi-directional WebSocket communication and Redis channel layer backend.
- Built REST APIs with DRF for user auth, room management, and message history secured with JWT.
- *Demonstrates:* Django Channels, WebSockets, Redis, DRF, JWT authentication, complex database modeling.

Smart Interview Prep | Django, DRF, React, TypeScript, PostgreSQL, LLM Integration , *Github*
- AI-powered interview platform generating personalized questions and feedback using LLM integration.
- Designed scalable PostgreSQL schemas for users, interviews, questions, and performance analytics.
- *Demonstrates:* Django + AI integration, full-stack capabilities, complex data modeling, user-centric application design.

AI-Powered Adventure Game — FastAPI | React | LangChain | PostgreSQL
- Designed an async-first FastAPI backend reducing generation latency by **40%** across story branches.
- Implemented a modular narrative engine supporting 6+ dynamic story themes with real-time LLM generation.
- Built a responsive UI featuring state persistence, progressive loading, and failure-safe retries.

EDUCATION

D.A.V College, *D.A.V College +2 (Science with CS)* 2077
Passed Year-2077(3.55 GPA) Jawalakhel, Kathmandu

Patan Multiple Campus, 2021 – 2026
Bachelor of Science in Computer Science and Information Technology (BSc.CSIT) Lalitpur, Bagmati

LANGUAGES

- English (Proficient), Nepali (Native), Hindi