

# SANGAM LAMSAL

GitHub: lamsalsangam | Portfolio: sangam.lamsalbrothers.com  
English (Fluent) · Japanese JLPT-N3 · Nepali (Native) · Hindi (Fluent)

## PROFESSIONAL SUMMARY

Full Stack Engineer with proven production experience architecting and delivering scalable web systems for Japanese government and enterprise clients. Expert in PHP/Laravel backend engineering with a modern frontend toolkit (React.js, Next.js, TypeScript) and a strong emphasis on system performance, clean architecture, and cross-functional delivery. Track record of leading end-to-end feature development, delivering significant operational efficiency gains, and shipping production systems under enterprise-grade reliability requirements. Seeking a senior or lead-level engineering role to drive technical direction and system quality.

**Core Competencies:** System Architecture · Laravel / Go / Python · React.js / Next.js · REST API Design · Database Optimization · Docker · Performance Engineering · Cross-Functional Collaboration

## TECHNICAL SKILLS

|                |                                                                     |
|----------------|---------------------------------------------------------------------|
| Languages      | PHP, JavaScript, TypeScript, Go, Python, HTML/CSS, C                |
| Frontend       | React.js, Next.js, Flutter, WordPress (Custom Themes), Tailwind CSS |
| Backend        | Laravel, CakePHP, Go (REST APIs), PHP                               |
| Databases      | MySQL, PostgreSQL, SQLite                                           |
| DevOps & Tools | Docker, Apache, Linux, Git, Composer, npm, Bun, VS Code             |
| Architecture   | MVC, REST, RBAC, Modular Monolith, Secure SDLC                      |

## EXPERIENCE

### Full Stack Engineer — Enterprise & Government Systems

May 2024 – Present

セキ株式会社 (Seki Co., Ltd.) | Japan

- Architected** and shipped a full-scale call center operations platform for a Japanese municipal government client using Laravel — delivering a multi-role system supporting the internal operations team with real-time workflow management on government infrastructure.
- Engineered** granular Role-Based Access Control (RBAC) from the ground up, enabling distinct permission scopes for multiple operator roles — reducing access-related support incidents and administrative overhead.
- Orchestrated** end-to-end delivery of tailored web solutions across multiple concurrent enterprise client projects, coordinating with cross-functional stakeholders to align technical output with business requirements on schedule.
- Optimized** multiple legacy production codebases for resource efficiency and maintainability — reducing redundant query loads, refactoring business logic, and improving throughput for better scalability under live traffic.
- Delivered** a Laravel/Tailwind CSS admin portal for a Japanese enterprise client that delivered significant improvements in staff data-handling efficiency through streamlined UX workflows and optimized backend data pipelines.
- Eliminated** third-party plugin dependency overhead by architecting fully custom WordPress solutions — cutting plugin-related performance degradation and maintenance burden across client deployments.

## KEY PROJECTS

### Japanese Municipal Voucher Program — Government Operations Platform

Laravel · MySQL · PHP · RBAC · Multi-Tenant Architecture

- Designed** and built a high-availability government operations system with a robust, normalized database schema — supporting the full workflow of a regional municipal voucher program.
- Implemented** a custom multi-role RBAC engine that enforced data segmentation across multiple operator tiers, reducing cross-team data contamination risk while maintaining real-time operational throughput.

- **Delivered** a production-ready system within project deadlines, collaborating with city government stakeholders and internal teams from requirements gathering through deployment.

### Japanese Enterprise Client — Admin Portal Redesign & Performance Uplift

Laravel · PHP · Tailwind CSS · MySQL

- **Re-architected** the application's data-flow pipeline — introducing server-side validation, optimized ORM queries, and refined admin UX — resulting in a measurable improvement in staff data-handling efficiency.
- **Refactored** business logic to reduce redundant database operations and eliminate N+1 query patterns, cutting average page load times on data-heavy admin views.
- **Shipped** a scalable, maintainable Laravel/Tailwind codebase that reduced future feature development time by consolidating reusable components and service layers.

### Japanese Public University — PowerCMS Theme Development

PowerCMS · CMS Templating · Reverse-Engineered Implementation

- **Built** a custom PowerCMS theme for a new sub-route on the a Japanese public university public website — designing templates, content models, and route configuration entirely through the PowerCMS admin panel.
- **Reverse-engineered** the templating approach from existing site sub-routes; with no documentation provided, the structure was inferred from the live system and adapted to the new route's requirements.

### えひめインターナショナル Meet-up — Bilingual Community Website

Astro · TypeScript · Tailwind CSS · Custom Theme · Solo Build

- **Built** a fully bilingual (Japanese / English) community organisation website end-to-end using Astro, TypeScript, and a custom Tailwind theme — covering content modelling, interactive UI patterns, responsive layouts, and accessibility-aware semantics throughout.
- **Engineered** base64-cloaked contact info with client-side JavaScript decoding — preventing email and phone-number harvesters from scraping the static HTML, while preserving functional mailto: and tel: links for legitimate visitors.
- **Designed** component-level tilt and reveal animations using progressive enhancement patterns; site degrades gracefully without JavaScript via noscript fallbacks and proper semantic HTML structure.

### SetuTunnel — Encrypted P2P File Transfer

PWA · WebRTC · AES-256-GCM · Zero-Knowledge Relay · Solo Build

- **Built** an installable Progressive Web App for end-to-end encrypted peer-to-peer file transfer — files stream directly between browsers over WebRTC with AES-256-GCM authenticated encryption, no accounts or cloud storage required.
- **Architected** a zero-knowledge relay: brokers WebRTC signalling but never sees file contents, keys, or metadata — removing the operator itself from the trust boundary as a deliberate design choice.

### Aptavach — Local-First RAG Document Assistant

RAG · Local LLM · On-Device Inference · Citation-Per-Claim · Solo Build

- **Built** a Retrieval-Augmented Generation assistant that answers strictly from user-provided documents, with an inline citation on every claim — no hallucinated sources, no answers ungrounded in the actual corpus.
- **Runs** entirely on-device with a local LLM: no cloud dependency, no document contents leaving the machine, no third-party API key — an intentional privacy architecture for sensitive-document Q&A.

## EDUCATION

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### Bachelor of Computer Science & Engineering — CGPA: 7.41

Visvesvaraya Technological University (VTU) — Belagavi, Karnataka, India

2018 – 2022

## INTERESTS

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Technical: System Architecture, Performance Engineering, AI & Machine Learning, Cybersecurity

Personal: Hiking, Reading, Traveling, Football