

# Sankalpa Bhattarai

## Full-Stack Developer

Laravel | Vue.js | AI Engineering (MCP, Claude Code)

bhattaraisankalpa47@gmail.com | +977 9824052233 | github.com/Udusgang | LinkedIn | Kathmandu, Nepal

### PROFILE

Full-stack developer, open to remote roles, shipping production Laravel and Vue systems since 2023, from schema design and REST APIs to the front end, deployment and maintenance. Lead developer of the task management platform at Diyalo Technology, where I designed its five-stage delivery workflow and sprint engine. I use Claude Code as a pair programmer and build AI into products through MCP servers and LLM APIs, with every change gated by tests and code review.

### TECHNICAL SKILLS

|                 |                                                                                                                                    |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------|
| Back end:       | PHP 8, Laravel 11, Eloquent, Node.js, REST APIs, RBAC and authentication, queues, jobs and schedulers, payment gateways, Slack API |
| Front end:      | Vue.js, JavaScript, TypeScript, React, React Native, Blade, jQuery, Bootstrap, Three.js and WebGL, GSAP, Astro                     |
| Databases:      | MySQL, PostgreSQL, schema design, reporting and analytics                                                                          |
| Testing:        | PHPUnit feature and unit tests, test-first regression fixes, Playwright browser checks                                             |
| AI engineering: | Claude Code (agentic coding), MCP server development, LLM APIs (Gemini, Groq) with fallbacks, guarded read-only data access        |
| DevOps:         | Linux servers, Git, GitHub, GitLab, CI/CD, cPanel, Cloudflare Pages, Netlify                                                       |

### EXPERIENCE

**Full-Stack Developer (Laravel)** | Diyalo Technology, New Baneshwor, Kathmandu **May 2024 – Present**

Lead developer of the Task Management System, a task and delivery layer built on top of the Grow CRM product, which the whole company uses to plan, ship and report work.

**Laravel 11 | PHP 8 | MySQL | Blade | jQuery | PHPUnit | Playwright | Slack API | MCP**

- **Designed a five-stage delivery workflow** (Planning, Designing, Development, Testing, Deployment): each stage has its own assignees, dates, duration, estimated hours and status, with forward-only hand-offs, a manager approval queue during sprints and phase date-change requests.
- **Built the developer and tester loop:** developers send work to testing, testers report bugs or push it back, rework is tracked, and a stage cannot complete until every reported bug is closed.
- **Designed and led the Sprint module:** per-project setup, backlog, planning with a live per-person load preview, XS to XL sizing with capacity checks, mid-sprint swaps with approval, burndown, and sprint reviews with velocity, at-risk work and frozen retro snapshots.
- **Automated the sprint lifecycle** with a daily scheduler that starts and closes sprints, creates the next one and carries unfinished work forward, on working days from a Nepali holiday calendar that shifts deadlines when holidays change.
- **Built the Analytics module** (KPIs, team heatmap, velocity, phase bottlenecks, task aging, per-person deep dive), built the business report, and led the Reports Hub, executive and delivery reports, with CSV and Excel export.
- **Built workflow automation and admin tools:** "when this happens, do that" automation rules, per-stage transition rules, staff offboarding with work hand-over, and Slack DM notifications.
- **Led a 32-tool MCP server** so AI assistants like Claude can file, move and deploy live tasks under the same permissions, stage rules and audit log as staff: tools refuse with a reason instead of forcing, screenshots use one-time tokens, and the Planning to Designing hand-off stays a human decision. Added a guarded read-only AI query endpoint with an audit log and kill switch.

- **Added LLM bug triage** with Gemini and a Groq fallback that classifies tester reports as genuine, avoidable, nitpick, repeated or not reproducible.
- **Wrote most of the 1,200+ test PHPUnit suite**, with a failing regression test written before each bug fix, and Playwright browser checks of real user flows. Also developed **WaterSoft** for the Dharan Water Supply Management Board in Vue.js.

**Laravel Developer** | Shangrila Informatives, Kathmandu

2023 – 2024

[Laravel](#) | [Node.js](#) | [MySQL](#) | [Git](#) | [CI/CD](#)

- **Built the e-Office system for Kathmandu Metropolitan City**: digital files, dispatch registers, multi-step approval workflows and role-based access.
- **Implemented digital signatures** for secure document signing and verification, with user authentication.
- **Built secure REST APIs for a School Management System** covering students, attendance, grades and reports.
- Owned features from architecture and database design to production deployment with Git and CI/CD, and maintained them after release.

**Freelance Full-Stack Developer** | Nepal and remote

Alongside employment

[Laravel](#) | [PHP 8](#) | [Bootstrap 5](#) | [jQuery](#) | [cPanel](#)

- **Himalayan Herbo** ([himalayan-herbo.com](#)): customised and launched a Laravel e-commerce store on the GroStore platform, with a product catalogue in NPR, featured, new and best-selling sections, keyword search with category, price and tag filters, product pages with video galleries, cart and sign-in-required checkout integrated with a payment gateway, email or phone sign-in, customer dashboards (orders, wishlist, address book), coupons, blog, newsletter and dark mode.
- **Begnaskhabar** ([begnaskhabar.com](#)): set up and customised a Laravel news portal for Pokhara, with a Nepali and English interface, live Bikram Sambat date, nine categories, breaking-news ticker, most popular and most viewed lists, articles with related posts, tags, social sharing and comments, photo gallery with lightbox, reporter pages, search, sign-up, newsletter and a custom Begnas Lake section, in production with HTTP/3 and Google Analytics.

## AI-ASSISTED WORKFLOW

- **Explore and plan**: the agent maps every caller, test and config a change touches before coding.
- **Build in small diffs**: the agent drafts, I steer and review each diff like a teammate's pull request.
- **Verify with tests**: a failing regression test comes before each bug fix, and the PHPUnit suite must pass before every release.

## PROJECTS

**Infinite Journey** | [Three.js](#) | [WebGL](#) | [Astro](#) | [Cloudflare Pages](#)

Scroll-driven WebGL journey across cosmic scales, plus a walk-in 3D library of 393 books in 25 languages.

[infinite-journey.pages.dev](#)

**Gravity TV** | [React Native](#) | [Expo](#) | [ExoPlayer](#) | [Netlify](#)

Live sports website, plus one React Native APK for Android phones and Android TV with D-pad navigation.

[gravitytv.netlify.app](#)

**AI video pipeline** | [Python](#) | [FFmpeg](#) | [AI APIs](#) | [Claude Code](#)

An AI agent that turns long interviews into captioned shorts, with sample renders, automated frame and loudness checks and a mistakes playbook. [github.com/Udusgang/effectcraft](#)

## EDUCATION

**B.Sc. CSIT** | Patan Multiple Campus, Tribhuvan University

2019 – 2024

**Higher Secondary Education (NEB)** | Mega National College

2017 – 2019