

Bhuwan Jung Thapa

Oxford, OH • info@bhuwanjungthapa.com.np • [linkedin.com/in/bhuwan-jung-thapa](https://www.linkedin.com/in/bhuwan-jung-thapa) • github.com/bhuwanjungthapa • bhuwanjungthapa.com.np

SUMMARY

Full-stack developer with 4+ years of professional experience building, securing, deploying, and maintaining production web applications. Currently pursuing a Master of Computer Science, expected May 2027, with a focus on applied AI. Builds RAG and machine-learning applications and uses AI-assisted development workflows to accelerate prototyping, testing, debugging, and documentation across Laravel, React, and containerized cloud environments.

SKILLS

Languages: TypeScript, JavaScript, Python, PHP, SQL, Java, C, C++

AI & Machine Learning: PyTorch, Hugging Face Transformers, sentence-transformers, FAISS, RAG, LoRA fine-tuning, NumPy, pandas, NLTK, MediaPipe

Frontend: React, Vue, Vite, Tailwind CSS, Bootstrap, SASS, Three.js, PWA, HTML5, CSS3

Backend & APIs: Laravel, Node.js, Django, FastAPI, REST, GraphQL, WebSockets, serverless functions

Data & Cloud: PostgreSQL, MySQL, MongoDB, Redis, Supabase, Firebase, AWS EC2/S3, Azure, Docker, CI/CD, Git, Nginx, Linux

EXPERIENCE

Full-stack Developer, Graduate Assistant — Myaamia Center, Oxford, OH

Aug 2025 – Present

- Maintain multiple AWS-hosted Laravel instances serving different tribal communities, each running an isolated web and PWA environment from a shared core codebase.
- Remediated critical security vulnerabilities by refactoring unsafe raw SQL into parameterized Eloquent queries and patching legacy dependencies flagged for path traversal risk.
- Hardened application security by resolving weak TLS cipher suites, enforcing HttpOnly and Secure cookies, and adding CSP, HSTS, X-Content-Type-Options, and SRI checks for CDN assets.
- Implemented role-based access control with Laravel guards, middleware, and policies, and improved PWA performance through Lighthouse audits, MySQL indexing, and backend pagination.

Tech stack: PHP, Laravel, MySQL, Docker, JavaScript, jQuery, AJAX, PWA, AWS, GitLab, REST, Agile

Full-stack Developer — I.T. Hive Solutions Pvt. Ltd, Bhaktapur, Nepal

Jul 2023 – Apr 2025

- Built and documented REST APIs (OpenAPI 3.0) with pagination, filtering, sorting, and per-route rate limiting, sharing Postman collections with partners.
- Eliminated N+1 queries through eager loading and composite indexes, improving data retrieval by 30%, and cut page load times 35% with AJAX partial updates and Redis caching.
- Containerized services with Docker and set up CI/CD with PHPUnit and PHPStan, deploying to AWS EC2/S3 with zero-downtime releases and Redis-backed background jobs.

Tech stack: PHP, Laravel, React, Vue, MySQL, Redis, Docker, REST, Postman, JavaScript

Production Team — Legalfit, Kansas, US (Remote, Part-time)

Jul 2021 – Jul 2025

- Deployed and maintained over 150 websites for U.S. law firms, auditing and validating data migrations and configuring client-specific branding.
- Integrated GA4 tracking in the CMS and worked with cross-functional teams to resolve data configuration issues affecting content delivery.

Tech stack: CMS, Google Analytics, Jira, Scrum, HTML5, JavaScript, CSS

PROJECTS

Generative AI RAG Chatbot — Document Q&A

- Built an end-to-end local RAG pipeline for course PDF question answering: pypdf extraction, heading-aware chunking with recursive fallback, MiniLM embeddings, and a persistent FAISS cosine-similarity index.
- Improved retrieval by combining dense FAISS search with BM25 keyword retrieval, and grounded answer generation with a strict prompt, citation metadata, and a similarity threshold that refuses when confidence is low.
- Built an evaluation harness measuring Hit@k, grounded rate, hallucination rate, BERTScore, and calibration, and experimented with LoRA fine-tuning of flan-t5-small on document-grounded Q&A pairs.

Tech stack: Python, Streamlit, FAISS, BM25, sentence-transformers, Hugging Face Transformers, Gemini API, OpenAI API, pypdf, matplotlib

ML-Based Word Prediction System

- Built a self-learning word prediction system using a Naive Bayes classifier trained on digital textbook text, served through a web interface with adaptive learning from new user input.

Tech stack: Python, Naive Bayes, Node.js, Express.js, React, Postman

EDUCATION

Master of Computer Science — Miami University, Oxford, OH

Aug 2025 – Expected May 2027

B.Sc. Computer Science and Information Technology — Tribhuvan University, Nepal

Nov 2018 – Dec 2022

CERTIFICATIONS

MERN Full Stack Web Development (Deerwalk) • [Data Structures and Algorithms \(UC San Diego\)](#) • [Java Programming and Software Engineering \(Duke\)](#) • [Foundations of Cybersecurity \(Google\)](#) • Certified Database [Developer](#) and [Administrator](#) (DBAcademy)