

KEERTHANA B V

AI Agent & LLM Applications Developer

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[LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Results-driven MCA candidate specializing in Python, NLP, and Agentic AI, with proven success building hybrid prompt routing engines and fine-tuning Legal-BERT models (84.9% F1-score). Experienced in deploying OpenAI APIs, HuggingFace Transformers, and advanced reasoning frameworks (ReAct, CoT) with secure vector search structures. Top 8% globally in adversarial LLM testing, possessing extensive experience in building secure, context-aware autonomous agent workflows.

TECHNICAL SKILLS

- **Languages:** Python, JavaScript (ES6+), TypeScript, Java, C, C++, SQL
- **AI & Machine Learning:** Generative AI, Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), Embeddings, LangChain, Llama Index, OpenAI API, Claude API, BERT, NLP, Chain-of-Thought Prompting
- **Frontend & Backend:** React.js, Next.js, Node.js, Express.js, REST APIs, PostgreSQL, MongoDB, HTML5, CSS3
- **DevOps & Tools:** Git, GitHub, Linux (Nginx), Vercel, Netlify, Postman, N8N Automation, Docker
- **Methodologies:** Agile, Scrum, SDLC, Unit Testing, Code Review, Technical Documentation

WORK EXPERIENCE

Full Stack Developer | **ASPL Tech Solutions Pvt. Ltd.** | Bengaluru, India

October 2025 – March 2026

- Spearheaded end-to-end development of 5+ client-facing web platforms using React.js and Node.js, achieving 100% on-schedule completion across healthcare, retail, and logistics industries.
- Built a systematized onboarding workflow across 4 departments via a custom Human Resource Management System (HRMS), cutting administrative processing time by 35%.
- Secured applications by implementing Role-Based Access Control (RBAC) with JSON Web Tokens (JWT) and industry-standard password encryption, achieving zero security incidents post-deployment.
- Managed the full Software Development Life Cycle (SDLC) for 3 live production sites on Linux servers, including Nginx configuration, SSL/TLS setup, and CI/CD pipeline deployment.

MERN Stack Developer Intern | **Dyashin Technosoft Pvt. Ltd.** | Bengaluru, India

November 2024 – January 2025

- Developed a full-stack e-commerce platform using MongoDB, Express.js, React.js, and Node.js (MERN) featuring secure JWT-based authentication and role management.
- Enhanced frontend performance using React Hooks and state management best practices, improving page load speed by 25% and delivering a seamless cross-device user experience.
- Designed and documented 15+ RESTful API endpoints with senior engineers for inventory tracking and order fulfillment, following OpenAPI specifications.
- Resolved 15+ critical bugs during User Acceptance Testing (UAT), reducing the post-launch defect rate by 40% and significantly improving platform reliability.

KEY PROJECTS

PromptRoute (Hybrid AI Router)

([Link](#))

Stack: Python, ONNX Runtime Web, WebGPU, Chrome MV3, Llama 3.3 (Groq API), Jest, JavaScript ES6+

- **Deployed** an offline-first hybrid prompt routing engine in a **Chrome Manifest V3** browser extension, leveraging **ONNX Runtime Web** and **WebGPU** inside a custom persistent Offscreen Document to achieve sub-**15ms** intent classification.
- **Optimized** cloud API consumption by building a dual-engine confidence thresholding router that localizes low-complexity queries while seamlessly offloading low-confidence queries (<55%) to cloud-hosted **Llama-3.3-70B** models, securing **80% token cost savings**.

- **Integrated** a dynamic cognitive wrapper supporting **17 academic reasoning paradigms** (such as Chain-of-Thought and ReAct prompting), replacing static instruction templates with context-specific intent steering.

AI-Powered Legal Document Analysis

([Link](#))

Stack: Legal-BERT, PyTorch, Hugging Face, OpenCV, spaCy, Python, React.js

- **Architected** a production-grade legal contract analytics platform utilizing **Legal-BERT** and **PyTorch** to automate clause extraction and risk analysis, achieving an **84.9% F1-score** and **84.7% accuracy** on the 510-contract CUAD benchmark.
- **Engineered** a watermark-resilient document pre-processing pipeline using **OpenCV** boundary grooming and adaptive thresholding coordinates, boosting **optical character recognition** (OCR) text recovery rates by +32% on stamp-contaminated and noisy PDF scans.
- **Formulated** an in-house Trust & Safety compliance framework featuring a spaCy-powered PII redactor and algorithmic fairness auditors that measured F1 parity across demographic classes, restricting bias disparity gaps to **under 10%**.

Blood Donor Management System

([Link](#))

Stack: React.js, Flask (Python), MongoDB, REST APIs, JWT Security, Vite, Bootstrap.

- **Developed** a high-performance full-stack medical registry and donor matching system utilizing **React**, **Python-Flask**, and **MongoDB** to digitize regional clinical donation lifecycles.
- **Programmed** dynamic donor-recipient blood compatibility algorithms and indexes to automate emergency clinical matching, drastically reducing lookup latency during critical triage windows.
- **Enforced** strict data privacy and application security standards by deploying custom **JWT-based role-based access controls (RBAC)** and secure REST endpoints to safeguard sensitive patient records.

EDUCATION

Master of Computer Applications (MCA) |

August 2025

RV Institute of Technology and Management, Bengaluru | **CGPA: 8.2 / 10.**

Bachelor of Computer Applications (BCA) |

September 2023

Community Institute of Commerce and Management, Bengaluru | **CGPA: 8.4 / 10.0**

CERTIFICATIONS & ACHIEVEMENTS

- **Google Cloud Professional:** Prompt Engineering for Generative AI — Google Cloud Skills Boost (2025)
- **Google Cloud Credential:** Introduction to Generative AI, LLMs & Responsible AI — Google Cloud Skills Boost (2025)
- **MERN Stack Specialization:** Industry Certification — Dyashin Technosoft Pvt. Ltd. (2025)
- **Best Paper Distinction:** NCRIE 2025, National Conference on Recent Innovations in Engineering, KSIT