

Lakshitha Wijerathne

Associate Software Engineer — AI Agents & Full-Stack | MCP · Google ADK · .NET · Spring Boot

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Objective

Associate Software Engineer specializing in production AI systems — both retrieval-augmented (RAG) and agentic (MCP, Google ADK). Shipped a live RAG document-Q&A platform (DocMind AI) on Azure with full CI/CD, a multi-agent travel platform (travel-plan.live), and an enterprise Expense Agent + MCP server. Strong full-stack foundation (FastAPI, .NET, Spring Boot, Next.js); promoted from Intern to Associate in 5 months. Seeking a Generative AI / AI Engineer role building reliable, retrieval-grounded, tool-using LLM systems.

Education

BSc (Hons) Computer Science — NSBM Green University (UGC) · Expected 2026 · GPA 3.6/4.0

G.C.E. Advanced Level — Physical Science · St. Thomas' College, Matale

Experience

Associate Software Engineer — BISTEC Global Services

Full-time · Jan 2026 – Present · Colombo, Sri Lanka (Hybrid)

- Built an AI Expense Agent on BISTEC's Hartley platform that automates BDO's expense and financial workflows, cutting repetitive manual finance work, including a custom Model Context Protocol (MCP) server connecting the agent to their financial tools and data.
- Design and build AI agents and MCP integrations that connect LLMs to real business systems, with multi-agent orchestration on the Google Agent Development Kit (ADK).
- Engineer prompt pipelines with structured / JSON-only output enforcement, response validation, and guardrails for reliable AI behavior.
- Collaborate with senior engineers in an Agile team to ship production AI features.

Software Engineer Intern — BISTEC Global Services

Internship · Aug 2025 – Jan 2026

- Developed AI-assisted assessment generation services using LLMs (structured MCQ and evaluation questions) with OpenAI APIs, prompt engineering, and JSON-only output enforcement.
- Built secure AI endpoints in ASP.NET Core integrated with a Next.js (React) frontend.
- Worked with EF Core, SQL Server, Docker, Azure DevOps CI, and Playwright E2E testing under Clean Architecture and MediatR.

Freelance Software Engineer — AI Automation & Integrations · Upwork

Freelance · Jun 2026 – Present · Sri Lanka (Remote)

- Build agentic AI systems and MCP integrations connecting LLMs to real business tools and data.
- Develop WhatsApp Business API automations and workflow automation across n8n, Make.com, and Respond.io to remove repetitive manual work.
- Deliver full-stack development and API integrations connecting third-party services end to end.

Technical Writer — Medium

Part-time · Mar 2025 – Sep 2025 · Remote

- Published technical articles translating complex software engineering and AI concepts into clear, accessible content for developers.
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Skills

AI / ML & LLMs: Generative AI | RAG (Retrieval-Augmented Generation) | Vector Databases (Qdrant) | Embeddings (OpenAI text-embedding-3) | LlamaIndex | Agent Development & Orchestration (Google ADK) | Multi-Agent Systems | Model Context Protocol (MCP) | Tool Use / Function Calling | Prompt Engineering & Guardrails | Deep Learning Fundamentals (CNN, RNN, LSTM)

Programming: Python | Java | C# | C | JavaScript | TypeScript | Dart | HTML | CSS

Frameworks & Libraries: FastAPI | ASP.NET Core | Spring Boot | LlamaIndex | LangChain4j | Flask | React.js | Next.js | Flutter

Backend & Data: RESTful APIs | SSE | Kafka | Qdrant | SQL Server | PostgreSQL | MySQL | Supabase | Firebase | Neon

Cloud & DevOps: Azure Container Apps | AWS (ECS) | Docker | Docker Hub | GitHub Actions | Azure DevOps | CI/CD | Cloudflare

Automation: n8n | Make.com | Respond.io | WhatsApp Business API

Testing & Tools: Unit & Integration Testing | Playwright (MCP) | Git | GitHub | Jira | Confluence | VS Code | IntelliJ IDEA | Visual Studio | Google Colab | Jupyter | Pydantic AI | Oracle OCI AI

Concepts: Data Structures & Algorithms | OOP | SDLC | Agile | Clean Architecture | Microservices | Event-Driven Architecture

Soft Skills: Leadership | Communication | Problem-Solving | Self-Learner | Time Management | Team Work

Achievements: Duothon 5.0 Inter-University Coding Competition — 5th place (Team 404_NotFound, IEEE NSBM, 2025).

Projects

DocMind AI — Production RAG Document Q&A – 2026 | [Live Demo](#) | [Article](#)

Production Retrieval-Augmented Generation platform: upload a PDF, ask questions, get source-cited answers.

LlamaIndex chunks and embeds text with OpenAI text-embedding-3-large (3072-dim) into Qdrant; cosine similarity retrieves the top-k chunks and GPT-4o-mini generates cited answers. Built session-level vector isolation for multi-tenant safety and shipped end-to-end type safety (Pydantic + TypeScript).

Technologies used - Python 3.12, FastAPI, LlamaIndex, OpenAI, Qdrant, Next.js, TypeScript, Docker, GitHub Actions, Azure Container Apps (scale-to-zero), CI/CD

AI-Powered Travel Planning Platform — Sri Lanka Tourism – 2026 | [travel-plan.live](#) | [GitHub](#)

Production multi-agent AI travel platform, live at travel-plan.live. Built a 6-agent system — a TripPlanner coordinator orchestrating Hotel, Guide, Vehicle, Itinerary, and Budget specialists — on Google ADK + Gemini, with real-time SSE streaming that surfaces the AI reasoning through each tool call. Reduced roughly 3 hours of trip research to a 2-minute conversation.

Technologies used - Google ADK, Gemini, LangChain4j, Java 21, Spring Boot, Next.js, AWS ECS, Supabase, SSE

AI Multi-Agent Content Pipeline — Auto Medium Article Generator – 2026

End-to-end AI content pipeline in n8n that turns a single topic into a publication-ready Medium article in a single hands-off run. Five specialized sub-agents run under a deterministic orchestrator: live web research with citations, custom architecture-diagram generation, royalty-free hero-image sourcing, article writing, and a fact-check QA gate against the verified research before automated email and file delivery.

Technologies used - n8n, OpenAI API, Prompt Engineering, Multi-Agent Orchestration, Task Automation

Certifications

- **Claude Code in Action** — Anthropic
- **Introduction to Model Context Protocol** — Anthropic
- **Building with the Claude API** — Anthropic
- **Introduction to Agent Skills** — Anthropic
- **Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate** — Oracle
- **Learn by Doing – Prompt Engineering 101** — KodeKloud
- **Docker Training Course for the Absolute Beginner** — KodeKloud

References

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