

TINSAE BEFEKADU

AI Agent Engineer | Backend Developer

MCP • Multi-Agent Systems • RAG • Node.js / Laravel / Python

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PROFESSIONAL SUMMARY

AI Agent Engineer with a strong software engineering foundation. I design **autonomous multi-agent systems, enterprise copilots and MCP integrations** and connect LLM reasoning to scalable **Node.js, Laravel and Django backends**. Focused on low-latency, deterministic, production-grade automation, with resilient data protocols and persistent agent memory.

CAREER HIGHLIGHTS

- End-to-end agent product:** built DoxaRank, an autonomous SEO engine combining LangGraph, MCP, Playwright, live SERP data and pgvector memory.
- Sub-second semantic search** in a multi-step RAG agent over complex technical documentation.
- Production-ready async pipelines** with Celery, Redis and Neon PostgreSQL for persistent agent state.

CORE SKILLS

Agentic AI & MCP: Model Context Protocol (MCP) Server Design, Multi-Agent Orchestration, State Graphs, LangGraph, LangChain, Microsoft Copilot Studio, Enterprise Copilots, Function / Tool Calling, Webhooks

RAG & Retrieval: Advanced RAG, Vector Embeddings, Vector Databases (pgvector, Pinecone), Semantic Search

Backend & APIs: Node.js, Laravel (PHP), Django, Python, REST API Architecture, Structured Outputs, Token-Budget Management

Data & Infrastructure: PostgreSQL, Neon, Redis, Celery, Playwright, Git, Linux, Postman

PROFESSIONAL EXPERIENCE

AI Agent & Backend Engineer Intern | Omishtu-Joy Tech Solutions

Jun 2026 – Present

- Architect **autonomous multi-agent systems** and task-execution pipelines that automate internal operations, client workflows and document intelligence.
- Develop custom **MCP server endpoints** and high-throughput REST APIs in Node.js and Laravel, letting agents query enterprise databases securely.
- Implement structured outputs, token-budget management and multi-step reasoning guards for **deterministic, low-latency** production execution.

AI Automation & Systems Engineer | Doxa Innovations

Jan 2024 – May 2025

- Engineered autonomous SEO intelligence agents with **LangGraph and MCP** for tool discovery.
- Integrated real-time search analytics (Google Search Console, SERP APIs) with **Playwright** browser automation for programmatic website audits.
- Architected asynchronous agent pipelines with **Celery and Redis**, backed by Neon PostgreSQL and pgvector for persistent agent memory.
- Built secure backend tool layers and API endpoints in Django and Node.js that expose data models to agent reasoning loops.

KEY PROJECTS

- DoxaRank Autonomous Agent Engine** (Playwright, live SERP tools, pgvector): end-to-end intelligence system for automated site analysis.
- AI-Powered RAG Knowledge Assistant** (Python, LangChain, vector embeddings): multi-step retrieval agent with dynamic API tool integration and sub-second semantic search.

CERTIFICATIONS

- Backend Web Development Specialization** (ALX)
- Introduction to AI & Data Literacy** (IBM SkillsBuild)