

Kota Kawagoe

Target Role: AI Application / Backend Engineer (Agents, RAG, Python)

Location : Kanagawa, Japan Email : kota7kawagoe@gmail.com

Portfolio : <https://project-kk.com> GitHub : <https://github.com/kota-kawa> LinkedIn :

<https://www.linkedin.com/in/kota-kawagoe-0a22263a7/>

**Summary :** Conducted research on multi-agent integration and designed/implemented an orchestration system that incorporates real-world feedback. Experienced in building Python backends with FastAPI + Docker/Nginx while also delivering strong UI/UX design grounded in an Art/Design background.

**Skills :** Languages & Backend: Python, TypeScript, JavaScript, FastAPI, Django, Flask

LLM / RAG: LangChain, LlamaIndex, LangGraph, FAISS, pgvector, Embeddings

Databases & Infrastructure: PostgreSQL, MySQL, Redis, Docker, Nginx, Linux

Frontend: React, Next.js, Tailwind CSS

**Selected Project : Browser-Agent: Browser automation agent with a Web UI (30% success rate on WebArena Shopping tasks)**

- Built an API around browser\_use using FastAPI and implemented a Web UI with noVNC to visualize and control browser operations.
- Added reliability features for real-world use, including tool-calling orchestration, retry logic, and failure classification.

**IoT-Agent: Chat-driven device control and an IoT management dashboard platform**

- Implemented an agent loop from chat instructions → task decomposition → device operations.
- Optimized inference cost and latency using a two-layer setup: cloud LLM + edge LLM.

**Experience :** Led a 3-person team in a joint research project with Manable Inc., designing and implementing a robust, privacy-conscious RAG system for internal knowledge utilization. Presented the results at FIT 2025, improving RAG answer accuracy by **1.75×**.

**Education :** 1. Kanagawa Institute of Technology, Faculty of Informatics, Department of Information Network Communication (B.S., expected)

Apr 2021 – Mar 2026

2. University of North Alabama Jun 2023 – May 2024

Dean's List (Fall 2023), GPA: 3.75/4.0, Final AI course project ranked #1 out of 30 students

**Awards & Activities :** Matsuo Lab LLM Course Final Competition: Developed a model with LoRA SFT + DPO; placed in the top 4% (70 / 1800).

**Meta Llama Ideathon 2024 :** Selected participant; developed a generative AI prototype.

**Languages :** **Japanese:** Native **English:** Business level (TOEIC 715; 1 year study abroad + presentation experience)