



INTERNSHIP

Intelligent Workflow Orchestration with Agentic AI on IBM watsonx

Objective: Design and build intelligent multi-agent workflows using IBM watsonx Orchestrate, optionally fortified with live data-driven decision-making using watsonx BI.

Contact person: **Samuel Vandecasteele**

GSM: +32 494 36 18 98

Type: Internship

Location: Kontich (+ home office)

Introduction



Objective

Design and build intelligent multi-agent workflows using IBM watsonx Orchestrate, optionally fortified with live data-driven decision-making using watsonx BI.

Key Learning Areas:

- Multi-agent orchestration and nested agent workflows
- Integration and orchestration with enterprise systems
- (Optional) Generative BI insights powering agent decision flows
- Building, documenting, and evaluating the business impact of agentic solutions

Deliverables

- Blueprint of the multi-agent orchestration workflow (e.g., diagram outlining agents and sequencing).
- Deployed Orchestrate agents with at least one orchestrated multi-step flow.
- (Optional) A BI-powered decision agent leveraging watsonx BI insights.
- Test results capturing performance, resilience, and business value.
- Written documentation covering design, rationale, implementation, and evaluation.



Assignment Tasks



1. Use Case & Flow Design

Choose a context, options include:

- HR Onboarding Assistant: handles resume parsing, background check initiation, IT provisioning, calendar scheduling.
- Sales Meeting Starter: agent gathers CRM account info, recent interactions, and auto-drafts meeting summaries.
- Procurement Request Orchestrator: handles quoting, vendor evaluation, workflow instantiation.

Sketch the anticipated multi-agent flow, identifying:

- Agent roles & tasks
- Order, dependencies, and conditional flows
- Integration points (e.g., email, CRM, HR systems)

2. Agent Development with Orchestrate

- Use the Agent Builder or ADK to build reusable agents for each task.
- Deploy agents and orchestrate via nested calls and shared context flows.
- Use prebuilt skills or agents from the catalog where applicable to speed up prototyping.

3. (Optional) Embedding watsonx BI

- Integrate an agent that queries business data via watsonx BI, using natural language to extract insights or trigger decisions.
- Example: A Sales agent asks BI: "Why did trial conversions drop last week?" and uses the answer to refine outreach messaging workflows.

4. Testing & Iteration

- Simulate end-to-end orchestration flows: trigger the primary agent, observe downstream agents executing, monitor response handling.
- Include error-handling logic, fallback steps, and multi-tasking support where applicable.

5. Evaluation & Documentation

- Present tangible metrics: e.g., time saved, error reduction, human steps replaced.
- Write a report covering:
 - Use case rationale and business value
 - Agent architecture and orchestration flow
 - BI integration (if applicable) and value added
 - Lessons learned and recommendations for scale

Apply now



Who should apply?

- You are a final year IT student who is not afraid of a challenge.
- You are an analytic person who is proficient in abstract reasoning.
- You are eager to learn new technologies and have an interest in cloud technologies.
- You are able to work independently.
- You have Java or JavaScript/Node.js knowledge.
- You are able to use DevOps principles.
- You are willing to learn and implement security best practices.

Interested in this internship?

Contact us!

info@i8c.be

+32 494 36 18 98

www.i8c.be