

JOB DESCRIPTION

1. JOB DETAILS:

Position Title:	AI Engineer - LLM-Based Multi-Agent Systems for B2B Optimization
Reports to:	Director of Sorbonne Center for Artificial Intelligence (SCAI)
Department:	Sorbonne Center for Artificial Intelligence (SCAI)
Location:	Abu Dhabi, UAE
Prepared / Revised on:	June, 2025

2. JOB PURPOSE / ROLE:

Join a cutting-edge research project at the Sorbonne Center for Artificial Intelligence Laboratory in Abu Dhabi, United Arab Emirates. At the forefront of Artificial Intelligence, this project combines the expertise of Sorbonne Université Center for Artificial Intelligence, PostGenAI@Paris cluster and APTIVIO's AI-powered sales optimization platform. We are seeking a highly motivated and experienced AI Engineer to contribute to the development and implementation of Large Language Model (LLM)-based agents within multi-agent systems for B2B decision optimization. This project aims to explore how LLM-based agents, embedded in a multi-agent environment, can collaboratively address complex challenges in B2B markets. You will be part of a team developing and refining these LLM-based agents, contributing to the design, implementation, and evaluation of their performance within a real-world context.

In this role, you will:

- Be part of a cutting-edge research project at the intersection of AI, multi-agent systems, and B2B optimization.
- Collaborate with leading researchers and industry experts in a stimulating and intellectually challenging environment.
- Contribute to developing innovative solutions that address real-world business challenges.
- Access state-of-the-art infrastructure and resources.

The 2 years position is based in the United Arab Emirates, at the Abu Dhabi campus of the Sorbonne Center for Artificial Intelligence, in the frame of an industrial partnership with Aptivio.

3. JOB DIMENSIONS

Number of Staff Supervised:	Direct Reports:	0
	Total:	0

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4. KEY ACCOUNTABILITIES:	
Key Priority	Key Activities
Data Acquisition & Preprocessing	<ul style="list-style-type: none"> Source, clean, and prepare large datasets relevant to B2B sales interactions, market trends, and customer behavior. Develop data pipelines for efficient data ingestion and transformation.
Multi-Agent System Development	<ul style="list-style-type: none"> Design and implement communication protocols and coordination mechanisms for LLM-based agents operating within a multi-agent system. Develop simulation environments to test and evaluate agent performance under various market conditions.
Performance Monitoring & Evaluation	<ul style="list-style-type: none"> Define and track key performance indicators (KPIs) to assess the effectiveness of LLM-based agents. Analyze agent behavior, identify areas for improvement, and iterate on model architecture and training methodologies.
Research Collaborations	<ul style="list-style-type: none"> Contribute actively to the design and implementation of experiments or measurements within the department's research projects. Conduct, analyze, and report on experimental measurements. Participate in research meetings and collaborate with local institutions.
Model Development & Fine-tuning	<ul style="list-style-type: none"> Contribute to the design and implementation of LLM-based agents tailored for specific B2B decision-making tasks (e.g., sales forecasting, risk assessment, negotiation strategies). Fine-tune pre-trained LLMs on domain-specific data to enhance their performance in the B2B context.
Health & safety	<ul style="list-style-type: none"> Collaborate with the Health and Safety Officer to develop Health and Safety procedures in accordance with UAE regulations and international best practices. Provide training to research lab users and ensure all required documentation is completed and properly recorded. Attend relevant training sessions and communicate key information to research lab users.
Policies and Procedures	<ul style="list-style-type: none"> Follow department policies, processes, standard operating procedures, and instructions so that work is carried out in a controlled and consistent manner.
Related Assignments	<ul style="list-style-type: none"> Perform other related duties or assignments as directed by the Line Manager.
5. QUALIFICATIONS, EXPERIENCE, & SKILLS:	

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Minimum Qualifications:

- Master's degree or PhD in Computer Science, Data Science, Artificial Intelligence, or a related field.
- Proven experience with LLM frameworks (e.g., ollama, langchain) and fine-tuning techniques.

Minimum Experience:

3 years of experience as a Lab engineer, including the PhD.

Job-Specific Skills:

- Strong understanding of machine learning principles, particularly deep learning architectures (e.g., transformers, RNNs).
- Familiarity with multi-agent systems and agent-based modeling.
- Proficiency in Python and relevant data science libraries (e.g., PyTorch, Scikit-learn).
- Excellent analytical and problem-solving skills.
- Strong communication and teamwork abilities.
- Experience in a research environment is highly desirable.
- Good practical skills, and the ability to devise, set up and run tests in the lab.
- Curiosity, creativity, and strong interest for scientific research.
- Languages: English is mandatory; French and Arabic are added advantage.