

# CrewAI Task: Market Intelligence Report on AI/ML Jobs in MENA

## Objective

Design and deploy a multi-agent system that autonomously searches the web for current information about the most in-demand AI/ML job roles in the MENA (Middle East and North Africa) region, analyzes trends, and compiles a summarized report.

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## Task Description

### Goal:

- Build a collaborative multi-agent system using CrewAI (or another framework).
- Agents must:
  1. Search and scrape data from job platforms (e.g., LinkedIn, Bayt, Wuzzuf, Glassdoor).
  2. Identify patterns and frequently mentioned AI/ML job titles.
  3. Extract skill requirements and job location distributions.
  4. Rank jobs based on demand metrics (post frequency, location spread, salary if available).
  5. Generate a concise report with data visualizations.

### Agents to Include:

1. **Web Search Agent** – Queries job boards and aggregates raw data.
2. **Data Extraction Agent** – Parses job postings to extract job title, skills, location, and company.
3. **Trend Analysis Agent** – Analyzes which roles are most in-demand, trending skills, etc.
4. **Report Writer Agent** – Compiles a clean markdown/PDF report with sections on:
  - Top 10 AI/ML roles

- Key skills required
- Country-wise job distribution
- Observed trends or shifts

**Deliverables:**

- Codebase for the multi-agent system.
  - Final report: “Top AI/ML Jobs in MENA – May 2025”
  - Optional: dashboard or CLI preview for trends before report generation.
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