# What are AI Agents and Agentic AI?

AI agents are autonomous systems capable of perceiving their environment, making decisions, and taking actions to achieve specific goals. These agents can be programmed to perform a variety of tasks, ranging from simple automation to complex problem-solving. **Agentic AI**, or agentic reasoning, goes a step further, emphasizing AI's ability to engage in decision-making that resembles human reasoning. Agentic AI is characterized by a few key abilities:

1. **Autonomy**: The AI agent operates independently without continuous human intervention.
2. **Decision-making**: It evaluates different options and chooses the best course of action based on its goals.
3. **Collaboration**: It can work with other AI agents or humans to accomplish tasks.
4. **Self-improvement**: The system can reflect on its actions, learn from them, and improve its performance over time【8†source】【9†source】.

# Use Cases of Agentic AI

1. **Healthcare**: AI agents can autonomously analyze medical data, make diagnostic decisions, and even suggest treatment plans. For example, AI in radiology can review imaging scans and collaborate with other agents to provide a diagnosis.
2. **Customer Service**: AI-powered chatbots or virtual assistants that handle inquiries, make recommendations, or even resolve complaints without constant human oversight.
3. **Supply Chain and Logistics**: Autonomous systems in supply chain management that can optimize routes, inventory, and forecasting based on real-time data analysis.
4. **Autonomous Vehicles**: AI agents control vehicles in real-time, making decisions about navigation, safety, and responding to environmental changes【8†source】【9†source】.
5. **Finance**: AI agents in financial markets autonomously monitor stock prices, execute trades, and adjust strategies based on market movements.

# What Is That GitHub Code Doing?

Crewai is a framework that generate agents . each agents perform tasks. Using tools made of alogoritms understand data and perform tasks.

Technologies: crew ai, recruitment tools linkenin, selenium web driver, os(accessing environment variables), urlib

This Python code snippet imports modules for working with Selenium to scrape LinkedIn profiles. It uses os for accessing environment variables (like a LinkedIn session cookie), urllib to handle URL encoding for search terms, and By from Selenium to locate elements on the page. This is typically used in web scraping scenarios to automate LinkedIn searches based on skills and collect user profile details like names, positions, and locations.

## Agents:

**researcher:**

  role: >

    Job Candidate Researcher

  goal: >

    Find potential candidates for the job

  backstory: >

    You are adept at finding the right candidates by exploring various online

    resources. Your skill in identifying suitable candidates ensures the best

    match for job positions.

**matcher:**

  role: >

    Candidate Matcher and Scorer

  goal: >

    Match the candidates to the best jobs and score them

  backstory: >

    You have a knack for matching the right candidates to the right job positions

    using advanced algorithms and scoring techniques. Your scores help

    prioritize the best candidates for outreach.

**communicator:**

  role: >

    Candidate Outreach Strategist

  goal: >

    Develop outreach strategies for the selected candidates

  backstory: >

    You are skilled at creating effective outreach strategies and templates to

    engage candidates. Your communication tactics ensure high response rates

    from potential candidates.

**reporter:**

  role: >

    Candidate Reporting Specialist

  goal: >

    Report the best candidates to the recruiters

  backstory: >

    You are proficient at compiling and presenting detailed reports for recruiters.

    Your reports provide clear insights into the best candidates to pursue.

## Tasks

**research\_candidates\_task:**

  description: >

    Conduct thorough research to find potential candidates for the specified job.

    Utilize various online resources and databases to gather a comprehensive list of potential candidates.

    Ensure that the candidates meet the job requirements provided.

    Job Requirements:

    {job\_requirements}

  expected\_output: >

    A list of 10 potential candidates with their contact information and brief profiles highlighting their suitability.

**match\_and\_score\_candidates\_task:**

  description: >

    Evaluate and match the candidates to the best job positions based on their qualifications and suitability.

    Score each candidate to reflect their alignment with the job requirements, ensuring a fair and transparent assessment process.

    Don't try to scrape people's linkedin, since you don't have access to it.

    Job Requirements:

    {job\_requirements}

  expected\_output: >

    A ranked list of candidates with detailed scores and justifications for each job position.

**outreach\_strategy\_task:**

  description: >

    Develop a comprehensive strategy to reach out to the selected candidates.

    Create effective outreach methods and templates that can engage the candidates and encourage them to consider the job opportunity.

    Job Requirements:

    {job\_requirements}

  expected\_output: >

    A detailed list of outreach methods and templates ready for implementation, including communication strategies and engagement tactics.

**report\_candidates\_task:**

  description: >

    Compile a comprehensive report for recruiters on the best candidates to put forward.

    Summarize the findings from the previous tasks and provide clear recommendations based on the job requirements.

  expected\_output: >

    A detailed report with the best candidates to pursue, no need to include the job requirements formatted as markdown without '```', including profiles, scores, and outreach strategies.

Main :

# Other Aspects of Agentic AI

* **Emerging Trends**: As AI agents become more capable, the field is moving toward creating workflows where agents not only complete tasks but also continuously improve through self-reflection. Tools like generative AI and multimodal models are enhancing these capabilities, allowing agents to process more complex data (like visual and textual information) and operate more efficiently in dynamic environments【9†source】【8†source】.
* **Challenges**: While agentic AI holds great promise, challenges like ensuring ethical decision-making, preventing bias, and maintaining transparency in decision processes remain significant areas of focus【8†source】.

In essence, agentic AI represents the next step in AI development, allowing for more intelligent, adaptive, and autonomous systems. As these technologies evolve, their applications are expected to transform industries and everyday life.