Building AI-Powered Financial Market Market Assistants with Agno

A hands-on workshop on multi-agent orchestration for financial insights

What is Agno?
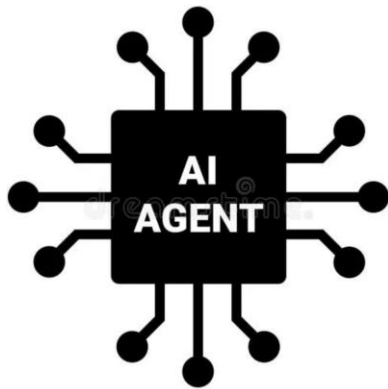
Full-stack framework for building Multi-Agent Systems

Agno is a lightweight, open-source framework designed for AI AI developers who want to integrate autonomous agents into their their projects.

Built for multimodal tasks

Handles text, images, audio, and video — making it versatile for for diverse financial data analysis.

Memory, knowledge, and reasoning capabilities

Enables building clean, composable and Pythonic agentic applications applications with sophisticated analysis abilities.

Agno vs. CrewAI vs. LangGraph

Agno	CrewAI	LangGraph
Full-stack, multimodal capabilities	Beginner-friendly	High flexibility
Memory and reasoning focused	Structured workflows	Better for scaling
Pythonic, clean architecture	Independent of LangChain	Complex workflow management

Why Agno for Financial Applications?

Structured Multi-Agent Collaboration

Ideal for complex financial workflows requiring multiple
specialized agents working together.

Memory & Reasoning Capabilities

Essential for tracking market trends, company performance,
performance, and making data-driven recommendations.
recommendations.

Multimodal Analysis

Process diverse financial data formats: text reports, numerical
data, charts, and market visualizations.

Workshop Overview

What You'll Learn:

✓ Integrate agents for web search, stock analysis, and financial reporting

✓ Leverage LLMs to understand and summarize financial data

✓ Build an interactive interface with Gradio

Multi-Agent Architecture

Web Search Agent

Retrieves market news, company information, and analyst reports with source attribution.

Stock Analysis Agent

Processes financial data, calculates metrics, and identifies patterns in market behavior.

Financial Reporting Agent

Synthesizes insights and generates comprehensive reports with reports with recommendations.

Leveraging LLMs with Agno

Model-Agnostic Integration

Agno works with any LLM provider (OpenAI, Anthropic, Groq)
for flexible deployment options.

Financial Context Understanding

LLMs process financial terminology, market sentiment, and
company-specific information.

Reasoning Capabilities

Agno enhances LLMs with structured reasoning for more
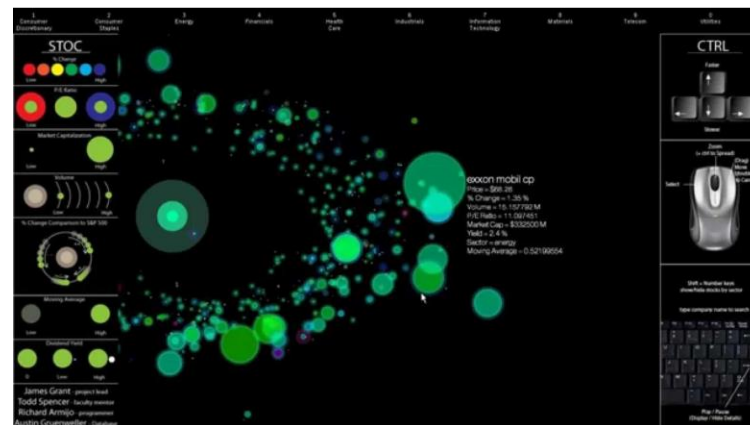accurate financial insights and recommendations.

Building the Gradio Interface

Interactive User Experience

Create intuitive input forms for stock selection, time horizon, and analysis strategy.

Real-time Visualization

Display financial data and insights through interactive charts and graphs.

```
with gr.Blocks() as demo:
    gr.Markdown("# Financial Market Assistant")
    with gr.Row():
        ticker = gr.Textbox(label="Stock Ticker")
        strategy = gr.Dropdown(["fundamental", "technical",
"sentiment"])
```

Next Steps & Resources

Extend Your Project

→ Add sentiment analysis from social media

→ Implement portfolio optimization

Resources

📖 Agno Documentation: github.com/agno-agi/agno

</> Workshop Code Repository

Blog post
8 ways to visualize financial market data