# Jaid.

*Uncovering hidden gems.*

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*AI and Financial Information Final Project*

# Investors struggle to separate the signal from the noise

## Too much data. Too little time.

Investors are bombarded with financial news, earnings reports, and regulatory filings. It's difficult to extract relevant, actionable insights.

## Headline bias & misinformation.

Sensationalized headlines can mislead investors, causing knee-jerk reactions and missed opportunities.

## Lack of personalized insights.

Generic news aggregators don't account for an investor's specific portfolio, risk profile, or past behavior.

## Insufficient decision making.

Without structured sentiment analysis, investors spend hours deciphering whether news is bullish, bearish, or neutral.

Every day, over **100,000+** financial news articles, SEC filings, earnings reports, and analyst opinions are published. Retail investors lack the time and expertise to filter through this deluge of information. The investment research space is a **$6B+ market** and is rapidly growing **(8.8% CAGR)**.

# Jaid.

## Your noise-canceling headphones for financial news.

**Automated daily newsletter** (and podcast!) with the most important news about your portfolio.

Jaid integrates with your brokerage, and tells you what you need to know in bite-size pieces.

**It makes stock news digestible enough that you can have it with your morning brew.**

## Without Jaid.

*Flooded with choices.*

*Sensational headlines.*

*No personalization.*

*No time for coffee.*

## With Jaid.

*One trusted news partner.*
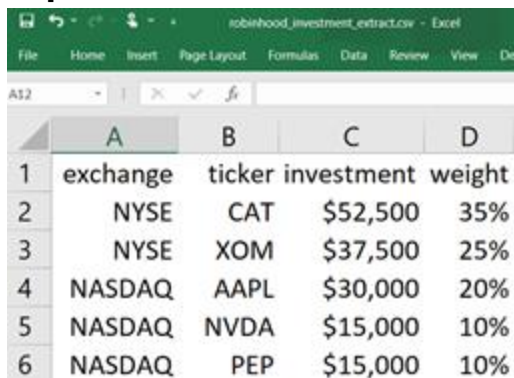
*Clear reporting.*

*Specific to your portfolio.*

*Time for coffee.*

# Jaid in action: Uploading your portfolio [Video]

Users begin by uploading their portfolio of stocks to Jaid, as taken from Robinhood, E-Trade, or any other brokerage platform.

## File upload >



### File Upload

```
# Temporarily transition to writeable drive location
os.chdir('/content')

# Prompt user to upload portfolio
uploaded = files.upload()

# Identify filename
filename = next(iter(uploaded))

# Convert portfolio into Pandas Dataframe
df = pd.read_csv(io.BytesIO(uploaded[filename]))

# Display pie chart
portfolio_pie_chart(df)

# Display the first few rows of the DataFrame
print(df.head())

# Return back to directory
os.chdir(DIRECTORY_DRIVE)
```

### Select User's Portfolio

Portfolios could be taken directly from API integrations with brokerage accounts such as E-Trade or Robinhood, or through an intermediary through Plaid.

In our example, we are using simple CSV data in a shared Drive that is pulled for whichever user is selected.

# Jaid in action: Building your newsletter [Video]

Jaid searches news for each stock in your portfolio, and builds an up-to-date newsletter tailored to your investments.
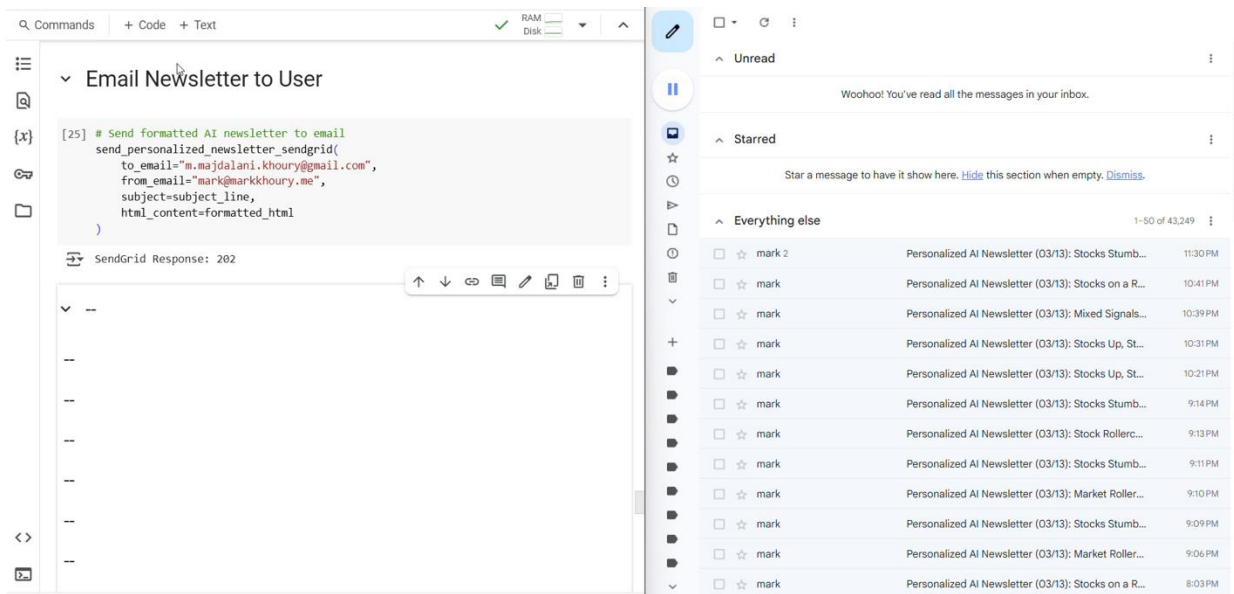


```
Run Agent

Gives the agent prompting to help give it an objective and then gives the agents output.

resp = agent.invoke(
    {
        "messages": [
            HumanMessage(
                content=f"""
                Build a well-researched daily newsletter (e.g. focused on yesterday's news) curated for *only* the individual stocks in the
                - First, use the 'get_portfolio_weights' tool to retrieve and store the portfolio weights and retreive today's date.
                - **Store the portfolio weights in your internal state using the key 'portfolio_weights'.**
                - **Store today's date in your internal state using the key 'todays_date'.**
                - Then, use the 'access_guidelines' tool to retrieve the guidelines.
                - **Store the guidelines in your internal state using the key 'guidelines'.**
                - Apply research tools to gather information. Use curate tools to ensure that no more than 10 articles are identified.
                - Run sentiment scores of curated list so you can report on sentiment for each article.
                - Build out final newsletter. Ensure guidelines have all been followed.
                """
            )
        ],
    },
    config={"recursion_limit": 50}  # Set recursion limit here
)

for m in resp["messages"]:
    if m == resp["messages"][-1]:
        m.pretty_print()
    else:
        print(m.pretty_repr()[:400])
```

# Jaid in action: Delivered straight to you [Video]

Finally, Jaid sends a well-formatted, customized newsletter with the latest news concerning your portfolio directly to your inbox.

# Jaid addresses investor needs, creating value

## Distilling relevant insights

-Brings market intelligence, sentiment analysis, and real-time updates to retail investors.
-Levels the playing field, allowing everyday investors to act with confidence and clarity.

## Beyond front page news

-AI models extract insights from high-quality sources (SEC filings, press releases, major financial publications).
-Doesn't just summarize news. it explains the impact on an investor's holdings.

## Personalized news feeds

-AI curates top financial stories based on an investor's portfolio, sector interests, and market trends.
-Generic news aggregators (Google, Seeking Alpha) flood investors with raw information but don't prioritize relevance or context.

## Sentiment driven analysis

-Uses sentiment analysis models to classify news, helping investors filter noise and focus on what matters.
-Prevents overreaction to misleading headlines and identifies overlooked opportunities.

# Jaid has is approaching several milestones on its roadmap

**High-impact upcoming feature releases:**

- **Automated portfolio retrieval:** Live connections of portfolios from Robinhood, E-Trade, and other e-brokerages

- **Deep research:** Advanced, customized stock & sector research

- **Additional asset class coverage:** Integrate commodities, ETFs, cryptocurrencies, and other financial investments

- **Enhanced user customization:** Tailor newsletter tone, format, length, and other parameters exactly to your specifications

**New developments:**

**Jaid 2.0 Podcasts:** Digestible financial news - perfect for your personal morning brew! (Appendix)

# Jaid plans to monetize and expand its product in the near future

**Jaid.**

> **Freemium model**

Free tier: Limited access

Monthly / yearly subscriptions: Advanced customization

> **Initial focus on retail investors**

> **Focus in the US, with plans to expand internationally**
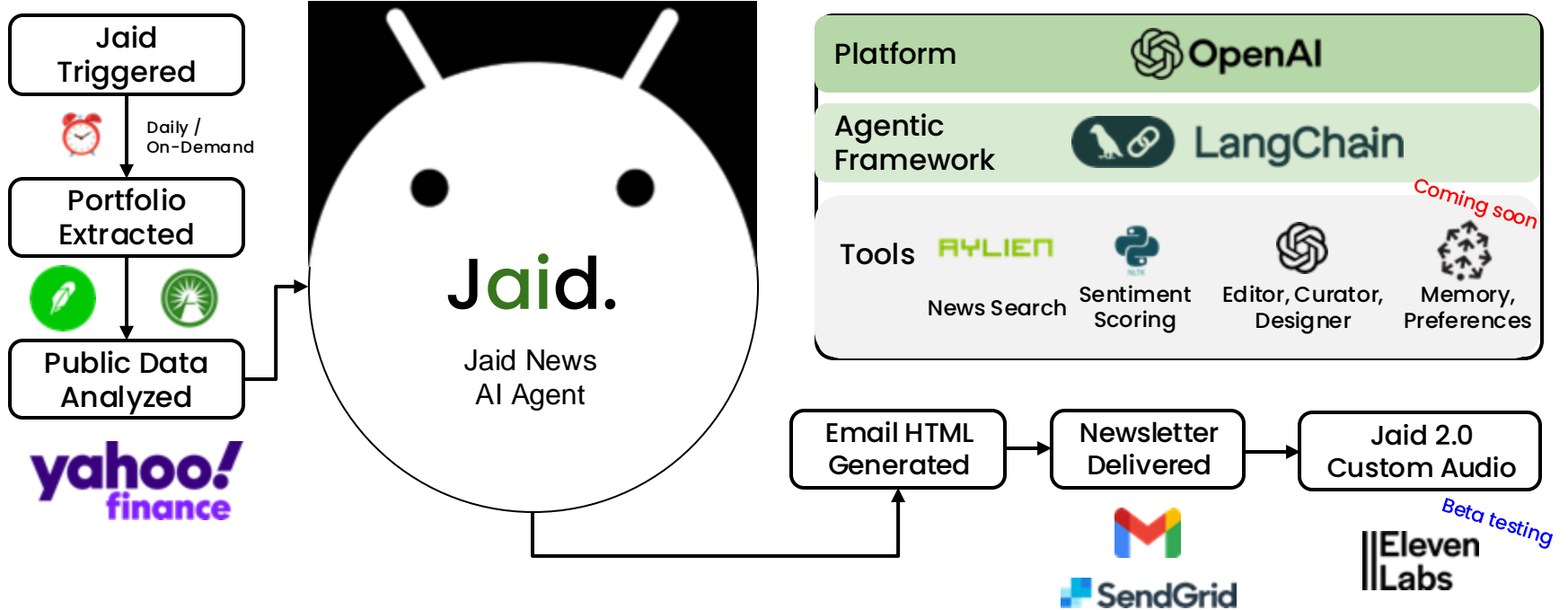
**Looking for beta testers!**

# Appendix

Questions?

# Appendix - How it Works

Users begin by uploading their stock portfolio to Jaid, as taken from Robinhood, E-Trade, or any other brokerage platform.

# Jaid's end-to-end process simplifies agent demands to ensure high quality output

| User Sign Up | Data Pre-Processing | Agentic Processing | Jaid Newsletter Sent |
|---|---|---|---|

- User either manually inputs portfolio or links Jaid to their brokerage account (future feature)
- User submits any preferences they have (e.g., update frequency, delivery times)

- Workflow standardizes company info (e.g., ticker, sector) into dataframe for agent to read
- Formatting guidelines are sent to agent
- Memory from previous sessions (e.g., articles already sent) put into state
- Preference data sent to agent

- AI agent processes all inputs and outputs a newsletter
- AI agent then checks newsletter output against guidelines (e.g., formatting, content, user preferences); if guidelines are not followed, agent tries again

- Assuming all guidelines are met, agent sends newsletter to user's email
- Agent stores articles sent in newsletter to memory
- User feedback through buttons on newsletter is captured and stored in memory

# We followed an iterative testing process of Jaid by progressively adding features to get to a quality MVP

| Basic Email | Newsletter Formatting | Sentiment Analysis | Source Reliability Checking |
|---|---|---|---|

- Lacked organization of newsletter format

- Had excellent readability, but lacked appropriate content

- Helped users parse through data, but lacked reliable sources

- Ensured that users were getting information from credible sources

# ChatGPT performed poorly when prompted with Jaid Instructions, indicating that it is not a viable substitute

## 1. Duplicative Sources

Uses the same article twice in the same newsletter

## 2. Displays Old Articles

Showed articles that were several weeks old, which were irrelevant to today's markets

## 3. Missed Key News Events

Failed to mention key layoff announcement from Bank of America on the day this query was run (3/12/2025)

## 4. Uses Unreliable Sources

Despite explicit prompting to the contrary, ChatGPT still utilizes unreliable sources, including secondary source aggregators

## 5. Shows Unclear Sentiment Data

Shows obvious errors in sentiment scoring, such as giving sentiments about the absence of news or showing conflicting sentiments to the user without explaining overall sentiment

# Jaid is differentiated from its competitors through key features including brokerage integration

| Feature | Jaid | Aiera | Seeking Alpha | Atom Finance | Kavout | WSJ 10-Point | Google Alerts |
|---|---|---|---|---|---|---|---|
| Portfolio-Specific News Curation | ✅ Yes | ❌ No | ❌ No | ❌ No | ❌ No | ❌ No | ❌ No |
| Personalized Newsletters | ✅ Yes | ❌ No | ✅ Yes | ✅ Yes | ❌ No | ✅ Yes | ❌ No |
| AI-Driven Sentiment Analysis | ✅ Yes | ✅ Yes | ❌ No | ❌ No | ✅ Yes | ❌ No | ❌ No |
| Historical Sentiment Tracking | ✅ Yes | ❌ No | ✅ Yes | ✅ Yes | ✅ Yes | ❌ No | ❌ No |
| User Feedback Integration | ✅ Yes | ❌ No | ❌ No | ❌ No | ❌ No | ❌ No | ❌ No |
| Brokerage Account Integration | ✅ Yes | ❌ No | ❌ No | ❌ No | ❌ No | ❌ No | ❌ No |
| Customizable Alerts | ✅ Yes | ✅ Yes | ❌ No | ✅ Yes | ✅ Yes | ❌ No | ✅ Yes |
| Mobile App Availability | ✅ Yes | ✅ Yes | ✅ Yes | ✅ Yes | ✅ Yes | ✅ Yes | ✅ Yes |
| Target User Base | Retail Investors | Institutional Investors | Retail Investors | Retail Investors | Retail & Institutional Investors | General Readers | General Readers |

# Appendix - Jaid 2.0 (Custom AI Podcast)

Jaid 2.0 will take AI news personalization further, graduating from text (newsletter) to audio (podcast) format.

A sample of a personalized Jaid 2.0 episode, in the style of a British newscaster, for exclusive preview.

## Listen

Jaid.

Jaid News
AI Agent

Voice provided by Eleven Labs.

Eleven Labs