

[Quick Start Guide](#): Page on installation and usage option provide details to setup project and use streamlit as well as CLI. In order to access streamlit app from running docker container, use log section and Local URL

Logs Inspect Bind mounts Exec Files Stats

You can now view your Streamlit app in your browser.

Local URL: <http://localhost:8501>

Network URL: <http://172.17.0.2:8501>

External URL: <http://115.99.168.145:8501>

Results from Steamlit App:

AI Factory Growth Ranker: Json file has data for 50 companies. Company Analysis can be performed for each individual company by selecting **Analysis Tab**, and a company for analysis at a time.



AI Factory Growth Ranker

[Analysis](#) [Rankings](#) [Top 20](#) [Add Company](#) [About](#)

Company Analysis

Select a company to analyze:

NVIDIA



NVIDIA

Arista Networks

Advanced Micro Devices

Intel

Broadcom

Marvell Technology

Qualcomm

Micron Technology

Analysis for company Intel:

Select a company to analyze:
Intel

Intel Details

Sector
Compute/AI Hardware

Operating Margin
19.0%

Growth Forecast
1.12x

Run Analysis

Analysis completed!

Analysis Results

Margin Score
2

Moat Score
2

Final Score
4.48

Growth Forecast
1.12x

Moat Analysis

Intel remains a foundational component of the AI Factory through its dominant x86 CPUs, which handle significant general-purpose compute, data pre-processing, and inference workloads. Beyond CPUs, Intel is actively building out its AI acceleration portfolio with Habana Gaudi accelerators, discrete GPUs (Data Center Max), and the open oneAPI software stack, alongside its strategic foundry services (IFS). However, when assessing its moat specifically within the specialized AI acceleration segment, Intel faces significant challenges. Architectural lock-in is limited; while x86 has a strong legacy, Intel's AI accelerators do not possess a proprietary standard akin to NVIDIA's CUDA, with oneAPI aiming for openness rather than lock-in. Ecosystem dominance in AI accelerators is nascent, with NVIDIA holding a commanding lead in design wins and reference architectures. Switching costs for customers moving to Intel's AI accelerators are lower than for those entrenched in CUDA, as Intel positions itself as an open alternative. Lastly, Intel does not currently hold a scarcity or bottleneck position in the AI accelerator supply chain; rather, it seeks to alleviate such bottlenecks by offering alternatives. While Intel's overall scale, R&D, and long-term foundry ambitions provide a base, its specific moat in the high-growth, specialized AI compute segment is still developing and faces intense competition.

TAFGS Formula

$TAFGS = (Moat\ Score \times Margin\ Score) \times Growth\ Forecast$

Formula Components

Moat Score (0-5): Competitive defensibility analysis using LLM

- Architectural lock-in
- Ecosystem dominance
- Switching costs
- Supply chain position

Margin Score (1-5): Operating margin strength

- 40%: Score 5
- 30%: Score 4
- 20%: Score 3
- 10%: Score 2
- ≤10%: Score 1

Growth Forecast: Future growth multiplier

TAFGS Formula detail is provided to the user along with the framework to get analysis for an individual company.

Ranking Tab, provides a framework to rank companies.

AI Factory Growth Ranker

AnalysisRankingsTop 20Add CompanyAbout

Company Rankings

Analyze All Companies

Analyzing HPE...

Top 20 Tab, provide features to get top 20 companies as well sector specific analysis.

 AI Factory Growth Ranker

Analysis

Rankings

Top 20

+ Add Company

About

 Top 20 AI Factory Rankings

Analysis Configuration

Key Insights

Analysis Type


Full Top 20 Analysis

Full Top 20 Analysis

Sector-Specific Analysis

Custom Selection

Add company Tab, provide features to add a company. (the feature is under development)

 AI Factory Growth Ranker

Analysis

Rankings

Top 20

+ Add Company

About

+ Add New Company

Add a new company to analyze. The data will be used for this session only.

Company Name

Sector

Cooling/Power

Operating Margin

0.20

Growth Forecast

1.20

Add Company

About Tab, provide features to the user to get details on different concepts.

AI Factory Growth Ranker

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About AI Factory Growth Ranker

Project Objective

The AI Factory Growth Ranker analyzes and ranks companies in the AI Factory Capital Stack using the TAFGS (Total AI Factory Growth Score) formula.

TAFGS Formula

$$\text{TAFGS} = (\text{Moat Score} \times \text{Margin Score}) \times \text{Growth Forecast}$$

Components:

-  **Moat Score (0-5):** Competitive defensibility analysis using LLM
 - Architectural lock-in (e.g., proprietary standards like CUDA)
 - Ecosystem dominance (design wins, reference architectures)
 - Switching costs / standard-setting influence
 - Scarcity or bottleneck position in the supply chain
-  **Margin Score (1-5):** Operating margin strength
 - Categorizes companies based on profitability metrics
-  **Growth Forecast:** Future growth multiplier
 - AI-driven growth projections

Technology Stack

- LangGraph: Workflow orchestration
- Google Gemini: LLM for moat analysis
- Streamlit: Web interface
- Plotly: Data visualization

Architecture

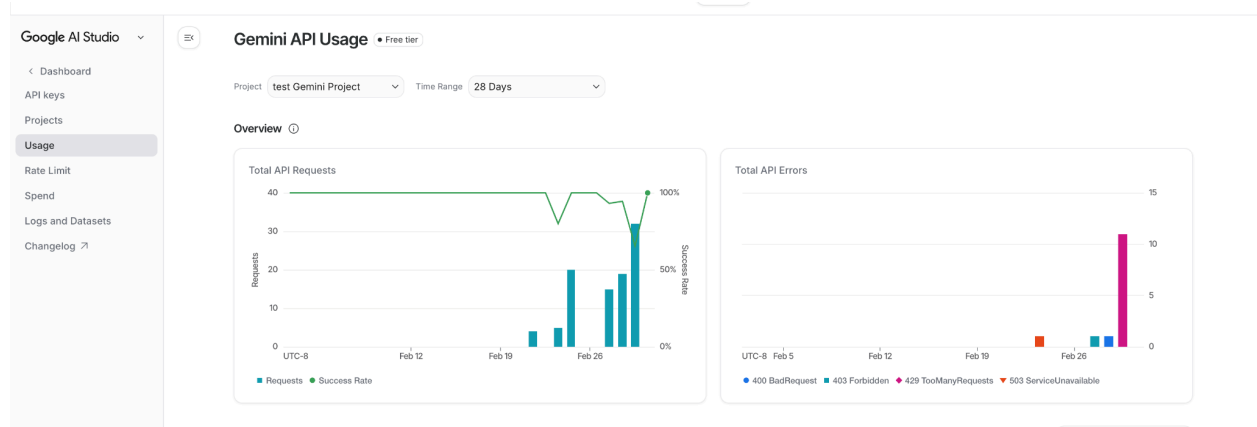
The system uses a multi-agent workflow:

1. **Margin Analysis Agent:** Calculates margin scores
2. **Moat Analysis Agent:** LLM-powered competitive analysis
3. **Ranking Agent:** Computes final TAFGS score
4. **Report Agent:** Generates investor-ready summaries

Technical Implementation

```
# Workflow Structure
workflow = StateGraph(AgentState)
workflow.add_node("analyze_margin", margin_analysis_agent)
workflow.add_node("analyze_moat", moat_analysis_agent)
workflow.add_node("calculate_rank", ranking_agent)
workflow.add_node("generate_report", report_agent)
```

Because of Google API quota exhaustion for running analysis on all companies, results are not being produced out of 50 companies.



Top20 companies can be achieved using Top20 Tab.