

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.

The screenshot shows the Streamlit interface for the "AI Factory Growth Ranker". At the top, there's a navigation bar with tabs: Analysis (which is active and highlighted in blue), Rankings, Top 20, + Add Company, and About. Below the navigation is a main title "AI Factory Growth Ranker" with a factory icon. The main content area is titled "Company Analysis". A dropdown menu is open, listing several company names: NVIDIA, Arista Networks, Advanced Micro Devices, Intel, Broadcom, Marvell Technology, Qualcomm, and Micron Technology. The word "NVIDIA" is currently selected in the dropdown.

Analysis for company Intel:

Select a company to analyze:

Intel Details

Sector	Operating Margin
Compute/AI Hardware	19.0%

Run Analysis

Analysis completed!

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

Analysis Rankings Top 20 + Add Company About

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

Analysis Type

Full Top 20 Analysis

Full Top 20 Analysis

Sector-Specific Analysis

Custom Selection

Key Insights

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

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

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

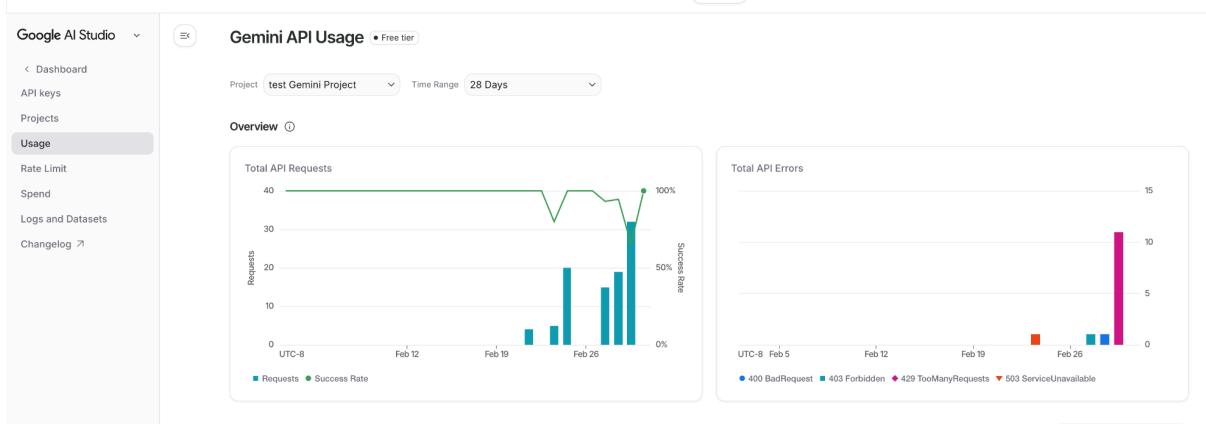
The system uses a multi-agent workflow:

- Margin Analysis Agent: Calculates margin scores
- Moat Analysis Agent: LLM-powered competitive analysis
- Ranking Agent: Computes final TAFGS score
- 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.