

Case Study: NVIDIA Earnings Dashboard

Context

At KR Capital, we use quantitative analysis to support portfolio construction and risk management in a long/short equity setting. This case study is designed to test your technical skills, analytical judgment, and ability to communicate insights effectively.

Objective

Build an Earnings Analysis Dashboard for NVIDIA (NVDA) using its daily returns over the 3-year period from 9/30/2022 to 9/30/2025, together with quarterly earnings dates and equity factor returns. Your goal is to explore how NVDA performs and behaves around earnings announcements, both in terms of returns and volatility. We expect this case study to take about 5-10 hours to complete.

Deliverables

- A working dashboard (ideally in Python using Streamlit or a similar library) that presents your analysis interactively
- A short summary (up to two pages) describing your approach, key insights, and any notable findings
- All underlying source code

Data

You will receive the following data covering the 3-year period from 9/30/2022 to 9/30/2025.

- NVDA daily returns, daily factor loadings, and quarterly earnings dates
- Daily risk factor returns

All dates and timestamps are in U.S. Eastern time. NVIDIA reports after market close at 4:20pm ET.

Guidance

You have freedom to design and structure the analysis as you see fit. Useful areas to consider include:

- NVDA performance around earnings (before, during, after), including an analysis of NVDA's total, factor-based, and idiosyncratic returns
- Volatility around earnings events
- An evaluation of the statistical reliability and limitations of your findings
- Effective visualization and summary of findings
- Ability to interactively switch between different views or analyses in the dashboard

Evaluation

Your submission will be assessed on:

- Analytical soundness and data handling
- Technical execution and code clarity
- Relevance, insightfulness, and creativity of analysis
- Presentation quality and usability of the dashboard