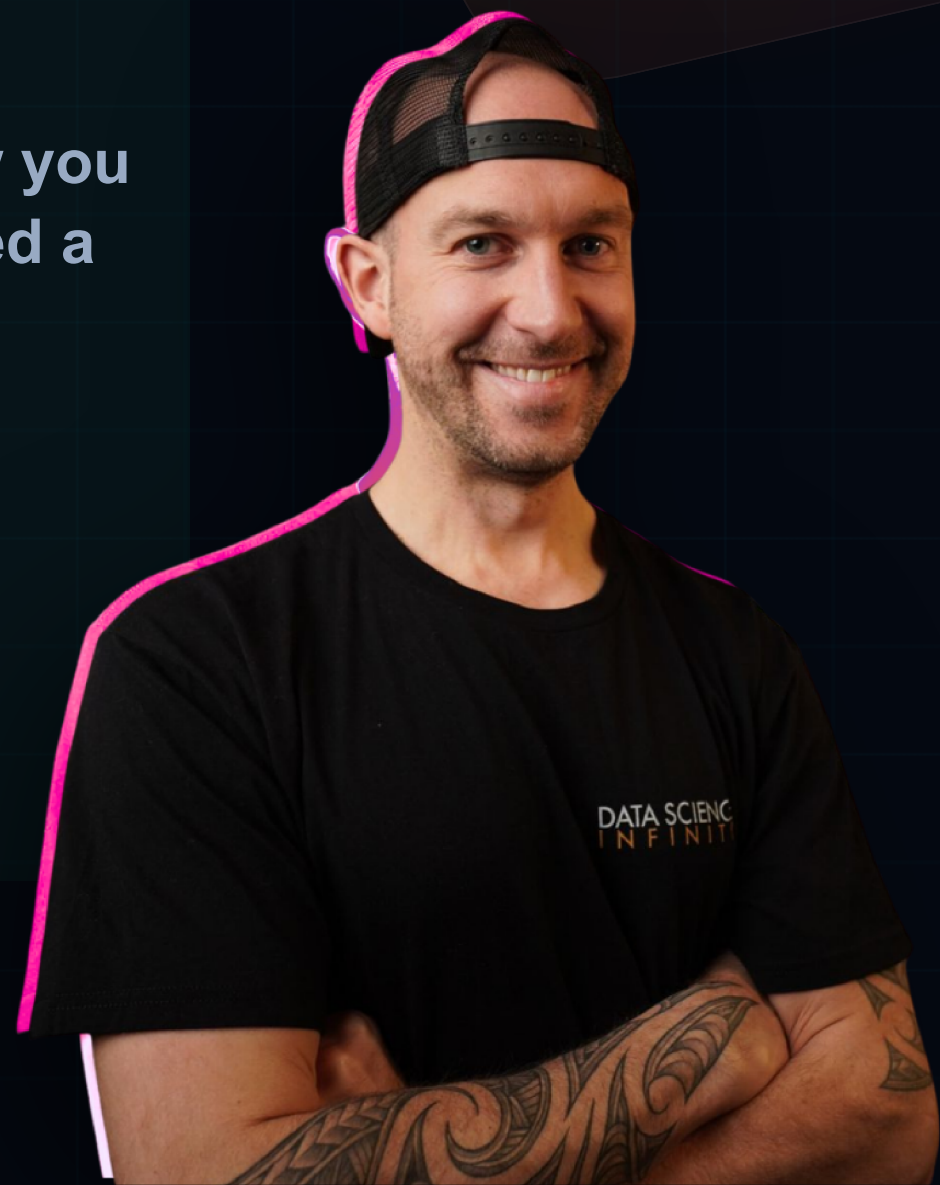

The Data Science Portfolio Projects Hiring Managers **Actually Want**

A strong portfolio should prove how you think, not just show that you followed a tutorial.



THE MISTAKE

A portfolio is not a folder of **notebooks**

Hiring managers are not just checking whether you used Python, SQL, Tableau, or Machine Learning.

They are looking for evidence that you can solve a messy problem, make sensible choices, and explain the business value.

PROJECT 1

A business analysis project using **SQL**

Show that you can get from raw tables to a decision-ready answer.

Use joins, filters, aggregations, window functions, and clear metric definitions. The point is not the query itself. The point is whether the numbers answer a real question.

What to show: the question, the tables, the logic, the final metric, and the decision someone could make from it.

PROJECT 2

A messy data cleaning project in **Python**

Real data is rarely clean, and employers know this.

Include missing values, duplicates, inconsistent categories, wrong data types, outliers, and checks. Explain what you changed, why you changed it, and what risk each issue created.

What to show: before-and-after checks, documented assumptions, reusable code, and evidence that the dataset is now analysis-ready.

PROJECT 3

A dashboard that leads to a **recommendation**

A dashboard should not just look polished. It should help someone decide what to do next.

Use Tableau or another BI tool to tell a clear story: the problem, the key metrics, the trend, the trade-off, and the action you would recommend to a stakeholder.

What to show: clean visuals, clear labels, sensible filters, and a written recommendation that connects the data to a business action.

PROJECT 4

An A/B Testing or statistics project with judgement

This shows you understand uncertainty, not just charts.

Define the hypothesis, metric, sample logic, result, limitations, and decision. Make it clear what you would do if the result was inconclusive.

What to show: the experiment question, success metric, assumptions, result, limitations, and recommended next step.

PROJECT 5

A Machine Learning project focused on **evaluation**

A hiring manager does not need another notebook that only says "I built a model."

Include a baseline, train/test split, leakage checks, metric choice, error analysis, and a plain-English explanation of whether the model is useful enough to act on.

What to show: not just the best score, but why that score matters and what mistakes the model still makes.

PROJECT 6

A GenAI project with clear **guardrails**

GenAI can strengthen your portfolio when it is used as part of a real workflow.

Show where AI helped, where you checked it, and where you would not trust it blindly. Strong candidates use GenAI, but still own the logic, evaluation, and outcome.

What to show: prompt design, evaluation checks, failure cases, human review, and where the workflow creates practical value.

THE STANDARD

Every project should make the **thinking visible**

The best portfolios are easy to review because the story is obvious.

For each project, include the problem, the data, the approach, the trade-offs, the result, and the recommendation. That is what turns a project into hiring evidence.

Simple rule: if a reviewer cannot understand the value in 60 seconds, rewrite the project summary before adding more code.

DATA SCIENCE I N F I N I T Y

**Pivot your career into Data
Science, AI, or Analytics in
under 6 months**



www.data-science-infinity.com