

Andrew Jones

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Principal Engineer and technical leader with a background in software and platform engineering, now specialising in data platforms and data engineering. Author of *Driving Data Quality with Data Contracts*. Regular speaker at conferences, meetups, and on industry podcasts.

OVERVIEW

I'm a Principal Engineer with 18 years experience, with the first half in software engineering and platform engineering and the last 10 years in data platforms and data engineering.

I joined GoCardless as its **first data platform/engineering hire** in 2017, and led the team as we built out our data platform from scratch.

From 2019 we've had a strategic objective to **use our data to build revenue-generating products**, which led me to think deeply about how to **ensure the quality and reliability of the data** was good enough to support this. That culminated with me coining and defining **data contracts** in 2021.

I went on to write the book on data contracts, *[Driving Data Quality with Data Contracts](#)*, in 2023, which continues to be well reviewed.

I'm currently a Principal Engineering—one of the 8 most senior software engineers at GoCardless—and whilst still hands-on with the Data Platform and other data teams I also **work with many teams across the organisation** supporting the application of data to unlock business value.

Being at GoCardless for nearly 8 years has enabled me to see the **long-term impact** of the decisions I have made, which has been rewarding and fulfilling, and I am looking for a similar opportunity to deliver over the long-term.

I'm self-directed, and happy to work wherever I can add the most value. I ensure the success of data projects across the organisation and deliver on that by **leading, mentoring, and influencing** others, to ensure the best outcome and the greatest impact for the business.

I have also spent some time **providing consulting services**, helping other organisations build data platforms and adopt data contracts, although will no longer continue to offer those services as I focus on a new full-time role.

For my expertise with Google Cloud and activity in the community I was invited to join the **Google Developer Experts** program in 2023.

Outside of work, I'm a father to 2 young children who keep me busy! Beside that, I enjoy running and brewing my own beers, and keeping up with the latest tech and data, including writing my [weekly newsletter](#).

PROFESSIONAL EXPERIENCE

GoCardless — *Principal Engineer, Data Services Group*

SEPTEMBER 2017 - PRESENT

I joined GoCardless in September 2017 as the first hire on our new Data Platform team, tasked with **building out our data platform from scratch**. Initially as the technical lead, I played a key role in designing our architecture, setting our direction, prioritising our work, and leading the team.

We spent the first couple of years building out the primitives of our platform, ensuring all our data was available and accessible, and putting in place the initial BI and Data Science tooling.

Since 2019 GoCardless has had a strategic objective to use our data to build revenue-generating products. Since then we've aligned the data platform with that objective, focussing on enabling the creation and publication of data that is reliable enough and of the right quality to build upon with confidence.

Today the data platform **drives key internal business processes**, such as payment processing and fraud detection,

and revenue-generating ML/AI products, including [Success+](#) and [Protect+](#).

In late 2022 I had the opportunity to write up my experiences on building reliable data platforms in a book, and [Driving Data Quality with Data Contracts](#) was published in June 2023.

We treat the **data platform as a product**, and I work closely with users of the platform and other stakeholders to provide them with the self-service capabilities they need to easily use the platform to deliver on their goals. That **product mindset** also extends to how we monitor the performance and costs of the data platform and how we use that data ourselves or provide it to users so they can make informed decisions when using our platform.

We embed **data governance** directly in the data platform to guarantee the correct handling of our data, particularly sensitive data such as payments and bank details, and I've worked closely with our Data Protection Officer to ensure our compliance, whilst also making it easy for users of the data within the platform to make use of the data governance tooling.

As a Principal Engineer I work closely with the other principal engineers and technical leaders across the business. Not only do I own the data architecture but I also align with and **contribute to the overall technical architecture**. Where needed I have also started dedicated forums to create greater alignment, for example I **created and chair a Data Architecture Council** to bring together our data teams, including data platform, Data Science, Analytics Engineering, and BI.

Technical experience:

- Google Cloud
- Databases: Google BigQuery, Postgres
- Event-driven architectures (Google Pub/Sub)
- Workflow orchestration (Airflow, dbt, Docker)
- Infrastructure-as-code (Terraform, Google Config Connector)
- Programming skills: Python, Java (including Apache Beam/Google Dataflow), Go, SQL
- CI/CD (Github)

Self-employed — Independent Data Consultant

AUGUST 2024 - MARCH 2024

For 7 months I was part-time at GoCardless and part-time offering consulting services as an Independent Data Consultant. This was primarily based on the data contracts work detailed in my book, helping other organisations achieve similar results by improving their data platforms.

I worked with organisations across different industries, including finance, health, and technology.

I developed and ran 5 in-person **public workshops** to positive feedback from attendees, and also ran the workshop privately within organisations. I also provided advisory and **strategic support**.

Whilst consulting was successful and I learned a lot, I had to make a decision whether to leave GoCardless or return full-time, and decided a return to full-time employment better suited my goals and my family life at this time.

Arm — Staff Engineer

SEPTEMBER 2008 - SEPTEMBER 2017

My first few years at Arm were spent building internal tools and solutions that helped Arm's verification engineers run tests on their processor designs on our high-performance compute clusters. As the amount of tests they could run increased, the amount of data generated from those tests also increased.

That led us to needing a data platform to store that data and make it available and accessible to the verification engineers, who used the test results to debug the processor designs. I became the tech lead of a new team responsible for building that data platform from scratch, and from then on have been specialising on data platforms and data engineering.