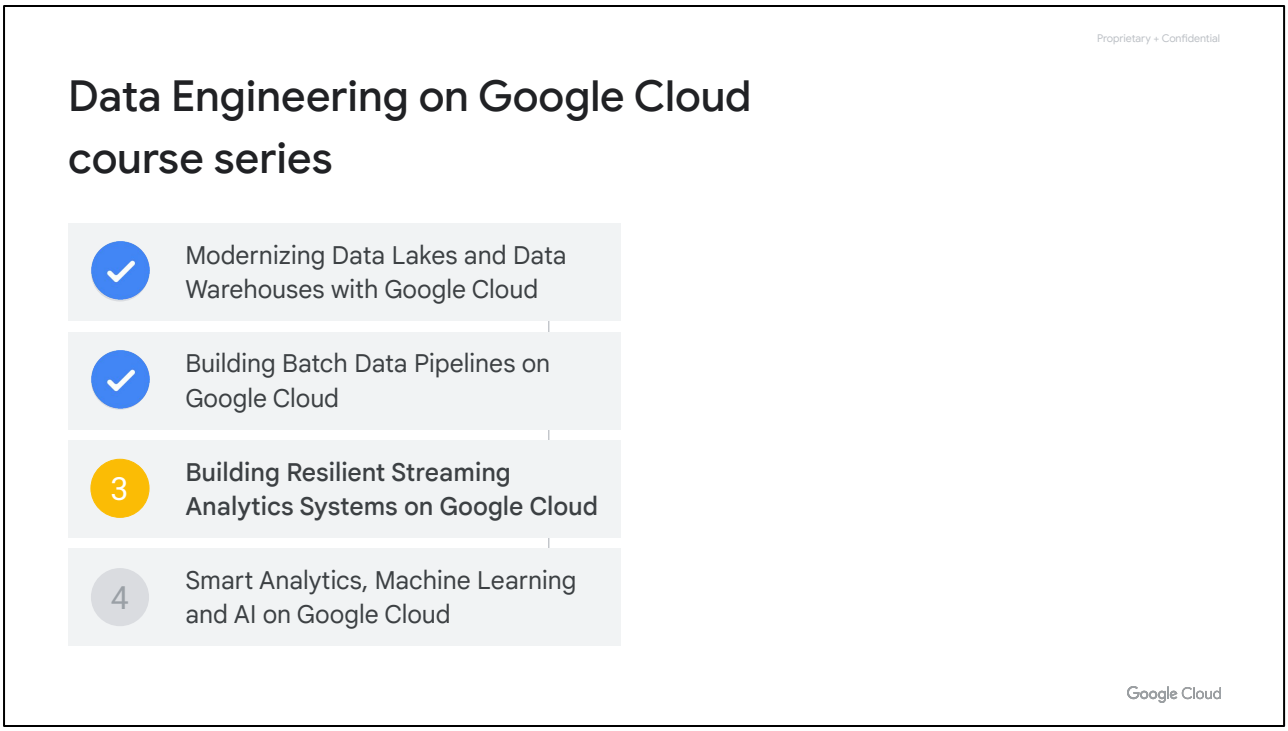
Google Cloud

Building Resilient Streaming Analytics Systems on Google Cloud

Damon Runion
Technical Curriculum Developer

Welcome to Building Resilient Streaming Analytics Systems on Google Cloud.
I'm Damon and I'm a Technical Curriculum Developer at Google.



Building Resilient Streaming Analytics Systems on Google Cloud is the third course of the Data Engineering on Google Cloud course series and it talks all about building resilient streaming analytics systems.

Those systems allow organizations to make accurate and timely decisions from data points generated in real time.

This course discusses what streaming data processing is, how it fits in your overall big data architecture, when streaming data processing makes sense, and what Google Cloud technologies and products you can choose from to build your own resilient streaming analytics solutions.

Course agenda

01	Introduction to Processing Streaming Data
02	Serverless Messaging with Pub/Sub
03	Dataflow Streaming Features
04	High-Throughput BigQuery and Bigtable Streaming Features
05	Advanced BigQuery Functionality and Performance

Here's how the course is broken down. We start off with what streaming data is and the challenges associated with processing streaming data. Like variable volumes and latency.

Next we look at using Pub/Sub, Dataflow, and BigQuery to help us ingest, process, and derive insights from data as it streams in. We dive into each product and learn about its Streaming capabilities.

Then, we'll also look at Bigtable when higher throughput is a requirement.

Finally, we review some of BigQuery's advanced analysis capabilities, like GIS Functions, and ways to improve query performance.