

01 – SUMMARY

Senior Data Architect with 25 years in software and data engineering, 16 of them at LC Waikiki, a global fashion retailer with 1,000+ stores in 50+ countries. I make data ready for decisions and AI. I designed and led the migration of an 80 TB enterprise data warehouse to Google Cloud BigQuery and led an 18-person data organization. Today I set the target architecture for new data solutions, including GenAI systems with evaluation and governance controls.

02 – SELECTED RESULTS

- Migrated an 80 TB enterprise data warehouse (3,000+ tables, 100+ source systems) from SQL Server and Cloudera to BigQuery: \$550K annual savings, 75% lower infrastructure cost, workflows 7x faster.
- Redesigned GA4 analytics on BigQuery: monthly cost from \$9K to \$3K, heaviest queries from 46 minutes to 8 seconds.
- Built a multi-agent GenAI competitive-intelligence platform across 20+ brands and ~95 markets: pricing and assortment decisions moved from 1 week to 1 day.
- Led an ETL offload of 200+ heavy analytical jobs from SQL Server to Spark, Hive and Impala: batch about 12x faster on average, up to 30x on the heaviest jobs.
- Two Microsoft global customer success stories (FastTrack data warehouse, OLAP semantic layer); 2nd place at the IDC Turkey Awards for an Azure reporting platform serving 1,200+ users.

03 – EXPERIENCE

Data Solution Architect · LC Waikiki

Sep 2024 – Present

- Own the target architecture, data modeling standards and reference implementations for new data solutions on Google Cloud; run architecture reviews and the ADR process.
- Designed and built a multi-agent GenAI competitive-intelligence platform on Cloud Run and Databricks with Delta Lake. An LLM classifier maps products to one taxonomy; price, stock and colour are benchmarked across 20+ brands, ~95 markets and 200 social accounts.
- Introduced LLM evaluation and AI governance controls (golden sets, trajectory checks, prompt-injection and drift tests) to keep production runs deterministic and auditable.
- Led the GA4 modernization on BigQuery: a gold-layer e-commerce data product, anomaly detection for data drift, scheduled queries cut from 138 to 82.
- Set Pub/Sub, Dataflow (Apache Beam, Java) and the BigQuery Storage Write API as the company-wide real-time streaming pattern.

Senior Data Engineering & Data Architecture Group Manager · LC Waikiki

May 2022 – Aug 2024

- Led the data engineering and data architecture organization: 18 engineers, architects and specialists, a \$1M+ platform budget, and vendor relationships with Google, Microsoft and Databricks.
- Designed and led the migration of the 80 TB warehouse from SQL Server and a 15-node Cloudera cluster to BigQuery, Dataflow, Dataform and Cloud Composer, rebuilding the landing, staging, core and data mart layers for 3,000+ tables with Git-based CI/CD and data quality assertions.
- Migrated the reporting platform for 1,200+ business users to Azure (Data Factory, Synapse Analytics, Analysis Services, Power BI).

Big Data Management & Data Architecture Manager · LC Waikiki

Aug 2019 – May 2022

- Owned the Cloudera Hadoop platform, the SQL Server enterprise data warehouse and the OLAP layers; led a team of 8–12 engineers.
- Led the ETL offload program that moved 200+ heavy analytical jobs to Hive, Spark and Impala with Airflow orchestration.
- Ran cloud proofs of concept on GCP (BigQuery, Dataflow) and Azure (Synapse, Data Factory); the FinOps and technical business case became the basis of the BigQuery migration.
- Implemented data governance, metadata management and MDM with data catalog and lineage tooling; introduced agile delivery, code review, on-call and architecture decision records.

- Data Engineering Team Lead · LC Waikiki**

Apr 2017 – Aug 2019
- Built the company's first data engineering team (4–6 engineers) and moved the platform from SQL Server and SSIS to a hybrid Hadoop and RDBMS architecture.
 - Deployed a production 15-node Cloudera CDH cluster and the first multi-source data lake (CRM, ERP, clickstream, third-party data) feeding reporting and machine learning.
 - Replaced heavy SSIS jobs with Spark, Hive and Impala pipelines for pricing, supply chain and customer 360; introduced Git, code review and automated testing.

- Data Architect · LC Waikiki**

Sep 2014 – Apr 2017
- Built the first semantic layer and OLAP cubes (SSAS) for merchandising, supply chain, finance and HR: 4,800 users, sub-second response, a 15 TB estate. Published as a Microsoft customer success story.
 - Rolled out columnstore indexes (35x compression) and designed Always On high availability.
 - Refactored 80+ SSIS jobs into incremental, metadata-driven loads, cutting the batch window from 7 hours to under 2.

- Earlier experience**

Sep 2000 – Sep 2014
- **Senior Business Intelligence Developer, LC Waikiki (May 2010 – Sep 2014).** Designed Turkey's first Microsoft FastTrack data warehouse (Kimball, star schema), published by Microsoft as a global customer success story. Built a metadata-driven SSIS ETL framework adopted by 80+ pipelines.
 - **Senior Software Developer, Goldas (Jan 2005 – May 2010).** Developed a multi-language ERP (C#, SQL Server) for accounting, treasury and finance, and two e-commerce platforms.
 - **Technical Trainer, BilgeAdam (Sep 2000 – Jan 2005).** Taught software development, database, web and systems courses.

04 – TECHNOLOGY

Google Cloud: BigQuery, Dataflow (Apache Beam, Java), Pub/Sub, Dataform, Cloud Composer (Airflow), Cloud Storage, Cloud Run

Other platforms: Databricks and Delta Lake, Azure Synapse Analytics, Azure Data Factory, Power BI, Cloudera Hadoop (Hive, Impala, Spark), SQL Server, SSIS, SSAS

Architecture and modeling: target and reference architectures, architecture reviews and ADRs, layered warehouse (landing, staging, core, data mart), medallion layers, data products, Kimball dimensional modeling, semantic layer and OLAP

Engineering: ELT and ETL, batch and real-time streaming, metadata-driven frameworks, CI/CD, Git, DataOps, cloud FinOps, performance tuning

Governance and quality: data governance, MDM, data catalog and lineage, data quality assertions, anomaly detection

GenAI: multi-agent systems, LLM-based product classification, LLM evaluation (golden sets, trajectory, prompt injection, drift), AI governance

Programming: SQL, Python, Java, C#

Leadership: team leadership, budget ownership, vendor and stakeholder management, mentoring, agile delivery

05 – EDUCATION	06 – CERTIFICATION	07 – LANGUAGES
MBA, Financial Economics, Marmara University, Istanbul (2002)	Google Cloud Certified Professional Data Engineer (2025, valid until 2027)	Turkish: native
B.Sc. Physics, Abant Izzet Baysal University, Bolu (1999), ranked 3rd in class		English: professional working proficiency
		German: elementary (A2)

08 – SPEAKING AND WRITING

- Speaker at the Microsoft AI & Security Summit and SQL Saturday Istanbul 2014. Organizer of LCW Datathon 2019; jury member and mentor at THY Travel Datathon 2019.
- Articles on data platforms and AI governance, and architecture katas, at ahmetkalafat.com.