

Data Science | Google Cloud

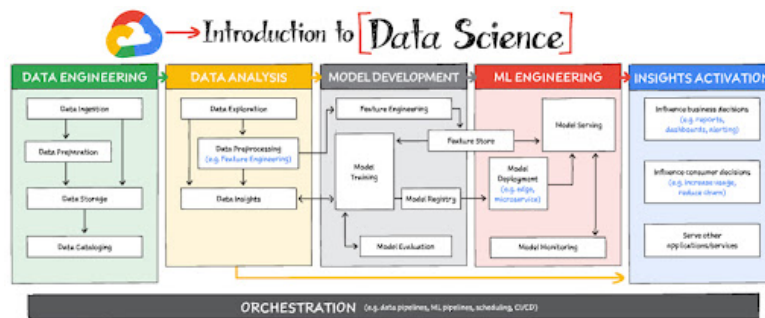
 cloud.google.com/data-science


Data science on Google Cloud

A complete suite of data management, analytics, and machine learning tools to generate insights and unlock value from data.

Why data scientists choose Google Cloud

Google Cloud offers all of the tools data scientists need to unlock value from data. From data engineering to ML engineering, TensorFlow to PyTorch, GPUs to TPUs, data science on Google Cloud helps your business run faster, smarter, and at planet scale.













13:37 












The six steps of data science on Google Cloud

A comprehensive data science toolkit

WORKLOAD Data science solutions

Key Products

WORKLOAD	Data science solutions	Key Products
Data discovery and ingestion	<p><u>Discover and ingest valuable data sources</u></p> <p>Ingest, process, and analyze real-time or batch data from a variety of sources to make data more useful and accessible from the instant it's generated.</p>	<ul style="list-style-type: none"> •  Data Fusion •  Data Catalog •  Pub/Sub •  BigQuery Data Transfer Service
Data lake and data warehouse	<p><u>Speed, capacity, and governance at scale</u></p> <p>Empower your teams to securely and cost-effectively ingest, store, and analyze large volumes of diverse, full-fidelity data.</p>	<ul style="list-style-type: none"> •  BigQuery •  Cloud Storage •  Dataproc •  Dataplex
Data preprocessing	<p><u>Preprocess your data with speed, scale, and ease</u></p> <p>Prepare your data with serverless and fully managed services. Manage and share your engineered features through a centralized repository.</p>	<ul style="list-style-type: none"> •  Dataflow •  Dataproc

WORKLOAD	Data science solutions	Key Products
Data analysis and business intelligence	<p><u>Drive business decisions through data</u></p> <p>Explore, analyze, visualize, and create dashboards with fully managed tools or customize your analytics environments to suit your needs.</p>	<ul style="list-style-type: none"> •  Looker •  BigQuery •  Vertex AI Workbench •  Looker Studio
Machine learning training and serving	<p><u>Accelerate ML deployment for all levels of expertise</u></p> <p>Build with the groundbreaking ML tools developed by Google Research. Choose from no-code environments like AutoML, low-code with BigQuery ML, or custom training with Vertex AI and Apache Spark. Bring more models into production to facilitate data-driven decision-making.</p>	<ul style="list-style-type: none"> •  Vertex AI •  AutoML •  Spark on Google Cloud •  BigQuery ML
Responsible AI	<p><u>Build AI that works for everyone</u></p> <p>Leverage responsible AI practices to inspect and understand AI models, and explainability to help you understand and interpret predictions made by your machine learning models. With these tools and frameworks, you can debug and improve model performance and help others understand your models' behavior.</p>	<ul style="list-style-type: none"> •  Explainable AI •  Model cards •  TensorFlow open-source toolkit

WORKLOAD	Data science solutions	Key Products
Orchestration	<p><u>AI governance through workflows</u></p> <p>Orchestrate analytic and ML workloads using managed Airflow or Kubeflow Pipelines. Automate, monitor, and govern your ML systems in a serverless manner, and store your workflow's artifacts using Vertex ML Metadata.</p>	<ul style="list-style-type: none"> •  <u>Vertex AI Pipelines</u> •  <u>Cloud Composer</u> •  <u>Vertex ML Metadata</u>

Feeling inspired? Let's solve your data science challenges together.

Want to learn more? Explore the [ML Engineer certification](#), try [Codelabs](#), or discover [industry patterns](#).

Cloud AI products comply with our [SLA policies](#). They may offer different latency or availability guarantees from other Google Cloud services.