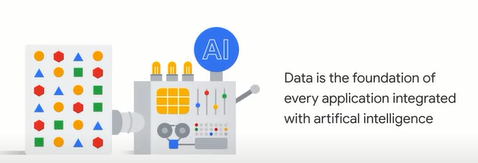
**Introduction.**

**Course Introduction.**

welcome to the google cloud big data and machine learning fundamentals course my name is marcus and i'm caitlin and we're from the google cloud team we'll be leading you through this course it's an exciting time to be exploring big data artificial intelligence and machine learning innovation in this field is presenting new opportunities that weren't available just a few years ago and by joining us on this course we hope you'll be putting yourself in a position to benefit from these technologies this course provides an introduction to the tools and technologies google cloud offers to work with large data sets and then integrate that data into the artificial intelligence and machine learning life cycle data and ai have a powerful partnership data is the foundation of every application integrated with artificial intelligence without data there's nothing for ai to learn from no pattern to recognize and no insight (clave, la esencia que nos permite encontrar la solución a un problema) to glean (recoger)



conversely (a la inversa, Por otro lado) without artificial intelligence large amounts of data can be unmanageable or under utilized google has nine products with over one billion users android chrome gmail google drive google maps google search the google play store youtube and photos that's a lot of data being processed every day to meet the needs of a growing user base

01:20

google has developed the infrastructure to ingest manage and serve high quantities of data from these applications and artificial intelligence and machine learning have been integrated into these products to make the user experience of each even more productive this includes features like search in photos recommendations in youtube or smart compose in gmail

01:42

google cloud offerings can be broadly categorized as compute storage big data and machine learning services for web mobile analytics and back-end solutions the main focus of this course is on big data and machine learning in the first section you'll be introduced to big data and machine learning on google cloud

02:02

this includes google cloud's infrastructure and big data and machine learning products in the second section of the course you'll explore data engineering for streaming data this includes how to build a streaming data pipeline from ingestion with pub sub to processing with data flow and finally to visualization using data

02:21

studio and looker after that you'll explore big data with bigquery google's popular data warehouse tool and bigquery ml the embedded ml functionality used for developing machine learning models directly in bigquery from there you'll compare the four options provided by google cloud to build and deploy a machine learning

02:40

model and in the final section of the course you'll learn how to build a machine learning workflow from start to finish using vertex ai a unified platform that brings all the components of the machine learning ecosystem and workflow together the course includes a mix of videos quizzes and hands-on labs

02:58

labs are hosted in a clean cloud environment for a fixed period of time at the end of each section you'll also find a resources section with links to additional reading material this course was designed for a wide range of learners this includes anyone at an organization involved or interested in the data to ai

03:15

lifecycle such as product managers data analysts data engineers data scientists ml developers and ml engineers while you'll be learning about services and concepts that are specific to big data and machine learning in this course remember that because this is a fundamentals level course some content will be geared toward learners who are

03:36

entirely new to cloud technologies and although this course has no prerequisites some knowledge of sql and basic machine learning concepts will be helpful you can learn more about where this course fits into the learning path for your specific role and all the training courses offered by google cloud

03:52

at cloud.google.com forward slash training okay are you ready to learn more about the exciting world of data and machine learning great let's get started