

Glossary

Advanced Data Analytics



Terms and definitions from Course 1

A

Active listening: Allowing team members, bosses, and other collaborative stakeholders to share their own points of view before offering responses

Aggregate information: Data from a significant number of users that has eliminated personal information

Analytics Team Manager: A data professional who supervises analytical strategy for an organization, often managing multiple groups

Analyze stage: The stage of the PACE workflow where the necessary data is acquired from primary and secondary sources and then cleaned, reorganized, and analyzed

Artificial intelligence (AI): Computer systems able to perform tasks that normally require human intelligence

B

Business Intelligence Analyst: (Refer to **Business Intelligence Engineer**)

Business Intelligence Engineer: A data professional who uses their knowledge of business trends and databases to organize information and make it accessible; also referred to as a Business Intelligence Analyst

C

Chief Data Officer: An executive-level data professional who is responsible for the consistency, accuracy, relevancy, interpretability, and reliability of the data a team provides

Construct stage: The stage of the PACE workflow where data models and machine learning algorithms are built, interpreted, and revised to uncover relationships within the data and help unlock insights from those relationships

D

Data anonymization: The process of protecting people's private or sensitive data by eliminating PII

Data cleaning: The process of formatting data and removing unwanted material

Data Engineer: A data professional who makes data accessible, ensures data ecosystems offer reliable results, and manages infrastructure for data across enterprises

Data professional: Any individual who works with data and/or has data skills

Data science: The discipline of making data useful

Data Scientist: A data professional who works closely with analytics to provide meaningful insights that help improve current business operations

Data stewardship: The practices of an organization that ensure that data is accessible, usable, and safe

E

Edge computing: A way of distributing computational tasks over a bunch of nearby processors (i.e., computers) that is good for speed and resiliency and does not depend on a single source of computational power

Execute stage: The stage of the PACE workflow where a data professional will present findings with internal and external stakeholders, answer questions, consider different viewpoints, and make recommendations

H

Hackathon: An event where programmers and data professionals come together and work on a project

I

Interpersonal skills: Traits that focus on communicating and building relationships

J

Jupyter Notebook: An open-source web application used to create and share documents that contain live code, equations, visualizations, and narrative text

L

Large Language Model (LLM): A type of AI algorithm that uses deep learning techniques to identify patterns in text and map how different words and phrases relate to each other

M

Machine learning: The use and development of algorithms and statistical models to teach computer systems to analyze patterns in data

Mentor: Someone who shares knowledge, skills, and experience to help another grow both professionally and personally

Metrics: Methods and criteria used to evaluate data

N

Nonprofit: A group organized for purposes other than generating profit; often aims to further a social cause or provide a benefit to the public

O

Open data: Data that is available to the public and free to use, with guidance on how to navigate the datasets and acknowledge the source

P

PACE workflow: A framework that provides an initial structure to guide the process of data analytics; PACE stands for plan, analyze, construct, and execute

Personally identifiable information (PII): Information that permits the identity of an individual to be inferred by either direct or indirect means

Plan stage: The stage of the PACE workflow where the scope of a project is defined and the informational needs of the organization are identified

Python: A general-purpose programming language

R

RACI chart: A visual that helps to define roles and responsibilities for individuals or teams to ensure work gets done efficiently; lists who is responsible, accountable, consulted, and informed

for project tasks

S

Sample: A segment of a population, often used to infer parameters of the whole population

T

Tableau: A business intelligence and analytics platform that helps people visualize, understand, and make decisions with data
