GLOSSARY FOR FUTURES BY DESIGN

Algoritm
A series of repeatable steps for carrying out a certain type of task with data. It is a set of instructions for solving a problem or accomplishing a task.

API
API is the acronym for Application Programming Interface, which is a software intermediary that allows two applications to talk to each other.

Big Data
Big data refers to data too large to edit on one computer.

Business analytics
A broad term for retrospective analysis that provides information for a company

Business Intelligence (BI)
Business Intelligence is a process for analyzing the collected data and presenting the right data for the right person. The right person refers to, for example, the board, CEO or others within the business that can benefit from the information to make better decisions based on data.

Clustering
Any unsupervised algorithm for dividing up data instances into groups in such a way that objects in the same group (called a cluster) are more similar (in some sense) to each other than to those in other groups (clusters).

Connectivity
Connectivity is a term for connecting devices to each other to transfer data back and forth.

Correlation
Correlation is a measure of a mutual relationship between two variables whether they are causal or not.

CSV
Comma-Seperated Values is a file type to store data. This can be done, for example, in Excel.

Cybersecurity
Cyber security is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks.

Dashboard
A dashboard is a visual display of your data. The dashboard is an information management tool used to track, analyze, and display key performance indicators, metrics, and data points.

Data cleansing
Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset.

Data engineer
A person that structures and designs processes and implements these processes for collecting and storing data.

Data mining
A process used to extract usable data from a larger set of any raw data and investigating large datasets to discover connections.

Data modeling
Creating a data model that provides a visual overview of the relationship between different tables or data sources.

Data set
A collection of data. The data set lists values for each of the variables, such as price and cost of an object, for each member of the data set. Data sets can also consist of a collection of documents or files.

Data structure
Data Structures are a specialized means of organizing and storing data in computers in such a way that we can perform operations on the stored data more efficiently. This could for instance be:

- Linear: arrays, lists.
- Tree: binary, heaps, space partitioning etc.
- Hash: distributed hash table, hash tree etc.
- Graphs: decision, directed, acyclic etc.

Decision tree
A decision tree is a tree-like model that acts as a decision support tool, visually displaying decisions and their potential outcomes, consequences, and costs. From there, the "branches" can easily be evaluated and compared in order to select the best courses of action.

Deep learning
A form of machine learning that uses layered neural networks. These networks are called 'deep' because of the amount of layers, due to the many layers it can also be considered a black box.

Digital currencies
Digital currency is a form of currency that is available only in digital or electronic form.

Drones
A drone is an unmanned aircraft. Drones are more formally known as unmanned aerial vehicles (UAVs) or unmanned aircraft systems.

Internet of thing (IoT)
IoT simply means "things" that are connected to the Internet. IoT consists of all machines, sensors and the equipment that are connected to each other and to the internet. IoT data can be used, for example, for predictive analytics based on AI models to predict problems before they happen, or for real-time monitoring that automatically signals a component would suddenly break.

Neural network
A neural network is a series of algorithms that endeavors to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates. In this sense, neural networks refer to systems of neurons, either organic or artificial in nature.

Machine learning
Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it to learn for themselves.

Quantum computing
Quantum computing is the study of how to use phenomena in quantum physics to create new ways of computing. Quantum computing is made up of qubits. Unlike a normal computer bit, which can be 0 or 1, a qubit can be either of those, or a superposition of both 0 and 1.

Web scraping
Web scraping is the process of using bots to extract content and data from a website.

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