

Course Glossary: Understanding Artificial Intelligence

- **Artificial Intelligence:** the ability of a computing system to perform specific tasks similarly to a human would.
- **Artificial General Intelligence (AGI):** A form of AI that can understand, learn, and apply intelligence across a wide range of tasks, similar to humans.
- **Computer Science:** The study of computers, computational systems, and algorithms, forming the foundation for AI.
- **Machine Learning:** the ability to autonomously make predictions or other activities involving inference upon data.
- **Explainable AI:** approaches to the application of AI in which humans can comprehend the decisions and/or predictions made by an AI system.
- **AI strategy:** a digital transformation approach aimed at adopting or strengthening the successful and responsible use of AI in an organization
- **Deep Learning:** a subarea of Machine Learning focused on building highly sophisticated models based on neural networks to perform more advanced and complex tasks, able to learn from massive volumes of data.
- **Speech Processing:** Using AI to interpret, analyze, and generate spoken language.
- **Natural Language Processing:** An area of AI that investigates tasks revolving around the interaction between a computer and natural language, namely text and speech.
- **Supervised learning:** Machine learning where the input dataset is labeled, and the algorithm attempts to apply the same labels to new data according to rules learned by examining the input dataset.
- **Unsupervised learning:** Machine learning where the input dataset is unlabeled, and the algorithm attempts to group the input dataset and eventually assign those groupings to new data.
- **Anomaly Detection:** Identifying data points that deviate significantly from the norm.
- **Robotics:** The design and use of robots to perform tasks in the physical world.
- **Computer Vision:** An area of AI that studies the analysis, processing, and automatic interpretation of visual data, namely images and video.
- **KPI (Key Performance Indicator):** any variable, factor, or measurable unit to drive a marketing or revenue strategy.
- **OKRs (Objectives and Key Results):** a rigorous goal-setting and tracking methodology to help business teams define measurable goals.
- **Data Governance:** the process of managing the availability, usability, integrity, and security of data in enterprise systems.
- **Data Infrastructure:** a set of diverse components, including hardware, software, services, policies, and more, that enable the consumption, storage, and shared use of data.
- **AI Literacy:** The ability to effectively, ethically, and responsibly understand, utilize and guide AI systems.
- **Data Democratization:** Making data accessible to a broader audience for informed decision-making.
- **Black-box vs. White-box Model:** Black-box models often offer high performance but lack transparency; they focus on the input and output variables. White-box models are more interpretable.
- **Algorithmic Bias:** Systematic errors in AI outcomes due to biased data or assumptions.