20 Important Jargons as it relates to Jetson Nano

1. Edge Computing
   - Running AI or data processing locally on a device (like Jetson Nano) rather than relying on centralized cloud servers. This reduces latency and enables real-time decision-making.

2. CUDA (Compute Unified Device Architecture)
   - NVIDIA's parallel computing architecture, allowing Jetson Nano to leverage its GPU for high-speed computations essential for deep learning.

3. NVIDIA GPU
   - Jetson Nano's Graphics Processing Unit, which accelerates AI computations, particularly useful for tasks involving matrix operations and parallel processing.

4. Model Optimization
   - Techniques used to make machine learning models faster and more memory-efficient, important on Jetson Nano due to its limited resources.

5. Kernels
   - Functions written to run on the GPU. Kernels are executed by many threads in parallel, allowing for fast computations.

6. Threads
   - The smallest unit of execution on the GPU, each thread handles a tiny piece of the overall task. Thousands of threads can run concurrently on the GPU.

7. Blocks
   - Groups of threads that work together. Threads in a block can share memory and synchronize with each other. Blocks make organizing and managing threads easier.

8. Grids
   - Collections of blocks that work together to execute a kernel. The grid defines the overall structure of how blocks (and their threads) are organized to solve the task.

9. Computer Vision
   - A field of AI focused on enabling machines to interpret and make decisions based on visual data. Jetson Nano is commonly used for such applications, given its GPU capabilities.

10. Image Classification
   - An AI task that categorizes images into predefined classes. Often performed on Jetson Nano for real-time applications like sorting or recognizing objects.

11. Object Detection
   - The identification and localization of objects in an image

12. Data Lake
- Large repository that allows internal and external data to flow without a predefined schema

13. MPP (Massively Parallel Processing)
- Divides computing tasks between processors in order to speed it up

14. Edge AI
- AI processing at the device level rather than in the cloud. Jetson Nano is an ideal platform for edge AI due to its size, power, and performance.

15. Precision (FP16 / INT8)
- Different levels of precision in computations. Jetson Nano supports lower precisions like FP16 (half precision) and INT8 (integer precision), which speed up AI tasks with minimal accuracy loss.

16. Latency
- The time it takes for the system to respond to an input. Lower latency is crucial for real-time applications on Jetson Nano, such as autonomous navigation.

17. ROS (Robot Operating System)
- A flexible framework for robot software development, commonly used with Jetson Nano in robotics applications for tasks like sensor integration and motion planning.

18. SLAM (Simultaneous Localization and Mapping)
- A technique used by autonomous systems for mapping an environment while simultaneously keeping track of their location within it, often run on Jetson Nano.

19. GPIO (General Purpose Input/Output)
- Pins on the Jetson Nano used for interfacing with external hardware like sensors, motors, and LEDs, essential for building robotics applications.

20. Docker
- A platform for deploying applications in lightweight, isolated containers. On Jetson Nano, Docker allows users to run multiple environments or projects without conflict.