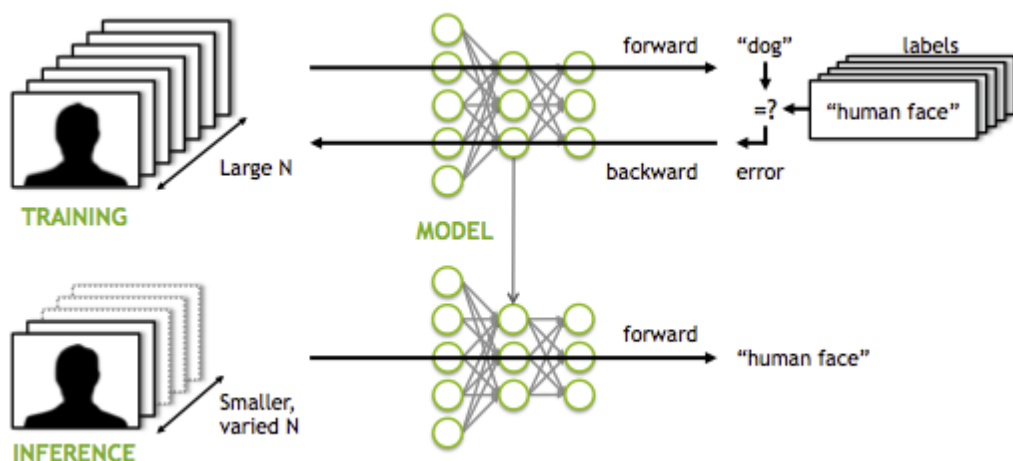


NVIDIA GPUs - The Engine of Deep Learning

Traditional machine learning uses handwritten feature extraction and modality-specific machine learning algorithms to label images or recognize voices. However, this method has several drawbacks in both time-to-solution and accuracy.

Today's advanced deep neural networks use algorithms, big data, and the computational power of the GPU to change this dynamic. Machines are now able to learn at a speed, accuracy, and scale that are driving true **artificial intelligence** and **AI Computing**



Deep learning is used in the research community and in industry to help solve many big data problems such as computer vision, speech recognition, and natural language processing. Practical examples include:

- Vehicle, pedestrian and landmark identification for driver assistance
- Image recognition
- Speech recognition and translation
- Natural language processing
- Life sciences



The NVIDIA **Deep Learning SDK** provides high-performance tools and libraries to power innovative GPU-accelerated machine learning applications in the cloud, data centers, workstations, and embedded platforms