

Signal processing is a branch of engineering that deals with the manipulation of signals for various purposes. It involves the extraction of information from signals and the removal of unwanted components. Signal processing is used in a wide range of applications, including communication, audio processing, image processing, and control systems. The quality of the output is directly related to the quality of the input and the accuracy of the processing algorithms.

Signal processing and identifying wave packets are more precise and accurate results to improve the quality of outputs.

Digital Signal Processing - This is a branch of signal processing that deals with digital signals. It involves the conversion of analog signals into digital form and the processing of these digital signals. Digital signal processing is used in a wide range of applications, including audio processing, image processing, and control systems.

Analog Signal Processing - This is the processing of signals that are continuous in time and amplitude. It involves the manipulation of these signals using various techniques, such as filtering, amplification, and modulation.

Waveform Signal Processing - This involves the processing of signals that are represented by waveforms. It is used in applications such as audio processing, where the waveform of a sound signal is analyzed and processed to improve its quality or extract specific information.

Image Signal Processing - This is the processing of signals that are represented by images. It involves the manipulation of these signals using various techniques, such as filtering, edge detection, and image enhancement. Image signal processing is used in a wide range of applications, including medical imaging, computer vision, and image compression.

of two sub-systems  
The knowledge base and  
The inference engine