

PREREQUISITES

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| Team ID | PNT2022TMID51044 |
| Project Name | AI-Powered Nutrition Analyzer for Fitness Enthusiasts |

Python packages:

- open anaconda prompt as administrator
- Type “pip install numpy” and click enter.
- Type “pip install pandas” and click enter.
- Type “pip install scikit-learn” and click enter.
- Type “pip install tensorflow==2.3.0” and click enter.
- Type “pip install keras==2.4.0” and click enter.
- Type “pip install Flask” and click enter.
- Deep Learning Concepts.

Artificial Neural Networks:

ANN is an efficient computing system whose central theme is borrowed from the analogy of biological neural networks. ANNs are also named as “artificial neural systems,” or “parallel distributed processing systems,” or “connectionist systems.” ANN acquires a large collection of units that are interconnected in some pattern to allow communication between the units. These units, also referred to as nodes or neurons, are simple processors which operate in parallel.

Convolution Neural Networks:

A convolutional neural network is a class of deep neural networks, most commonly applied to analyzing visual imagery. The construction of a convolutional neural network is a multi-layered feed-forward neural network, made by assembling many unseen layers on top of each other in a particular order. It is the sequential design that gives permission to CNN to learn hierarchical attributes. In CNN, some of them are followed by grouping layers and hidden layers are typically convolutional layers followed by activation layers.