Task

1. How do you convert nonlinear to linear equations?

The standard form of a linear equation is Ax+By=C. To change an equation written in slope-intercept form (y=mx+b) to standard form, you must get the x and y on the same side of the equal sign and the constant on the other side.

1. What is PCA and how it works?

Principal component analysis, or PCA, is a statistical procedure that allows you to summarize the information content in large data tables by means of a smaller set of “summary indices” that can be more easily visualized and analyzed.

PCA is a tool for identifying the main axes of variance within a data set and allows for easy data exploration to understand the key variables in the data and spot outliers. Properly applied, it is one of the most powerful tools in the data analysis tool kit.

1. Framework c++ of AI

TensorFlow

#### Caffe from Berkeley

#### Microsoft Cognitive Toolkit (CNTK)

#### mlpack Library

#### SHARK Library

#### Armadillo

#### Faisis

#### OpenNN

#### FANN

#### Boosting