

## Deliverables

### Research report detailing:

Collect massive data about various kinds of food mainly from the following 3 websites:

58PIC: <http://www.58pic.com/tupian/shiwu.html>

BOOHEE: <http://www.boohsee.com/food/>

FITNES: <http://www.fitnes.cn/food/>

**Prepare data:** Find pictures and related data (such as calorie, quality and so on) of various foods, then screen out foods to ensure the diversity and commonness of data.

**Analyze the data sets:** Associate food images with related data and store them in groups according to different criteria.

### Training algorithm.

**Test algorithm:** Test whether the food picture and data match each other, and evaluate the richness of the food types in the database.

① Use the CNN algorithm.

There are four main steps in CNN: convolution, subsampling, activation and full connectedness. (Hhchin87, 2015)

### Reference:

Hhchin87. (2015). Convolutional Neural Networks(CNN) Introduction. Retrieved on November 2, 2018 from:

<https://www.google.com.hk/amp/s/algobeans.com/2016/01/26/introduction-to-convolutional-neural-network/amp/>