Deep Learning

* **Data preparation**
  + 2.1 Load data
  + 2.2 Check for null and missing values
  + 2.3 Normalization
  + 2.4 Reshape
  + 2.5 Label encoding
  + 2.6 Split training and valdiation set
* **3. CNN**
  + 3.1 Define the model
  + 3.2 Set the optimizer and annealer
  + 3.3 Data augmentation
* **4. Evaluate the model**
  + 4.1 Training and validation curves
  + 4.2 Confusion matrix