Report

For continuous-valued attributes, I assume they are following the Gaussian distribution. By calculating means and variances of one attribute correspoinding to each target attribute values, we would obtain several Gaussian distributions representing the likelihood $p(x = c|yes)$ and $p(x = c|no)$.

For missing attribute values, I used Laplacian smooth to solve it. Basically it uses a small amount of probability to substitute 0 in order to get a non-zero probability, which assumes that every case appears at least once. What we need to do is just add 1 in the numerator of probability and k in the denominator, where k is the expected number of types of value in that attribute.

Test Result

```
1  Fold1 : 0.8325091378198237,
2  Fold2 : 0.8382068372393033,
3  Fold3 : 0.8353042356482477,
4  Fold4 : 0.8318641152440336,
5  Fold5 : 0.8340141904966674,
6  Overall : 0.8343797032896152
```