



Pattern Recognition Methods  
and  
Introduction to Machine Learning

Homework 3 - Report  
Condensed Nearest Neighbours

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9.04.2019

The same datasets from “playing with k-NN” are used.

Results for the first dataset are below:

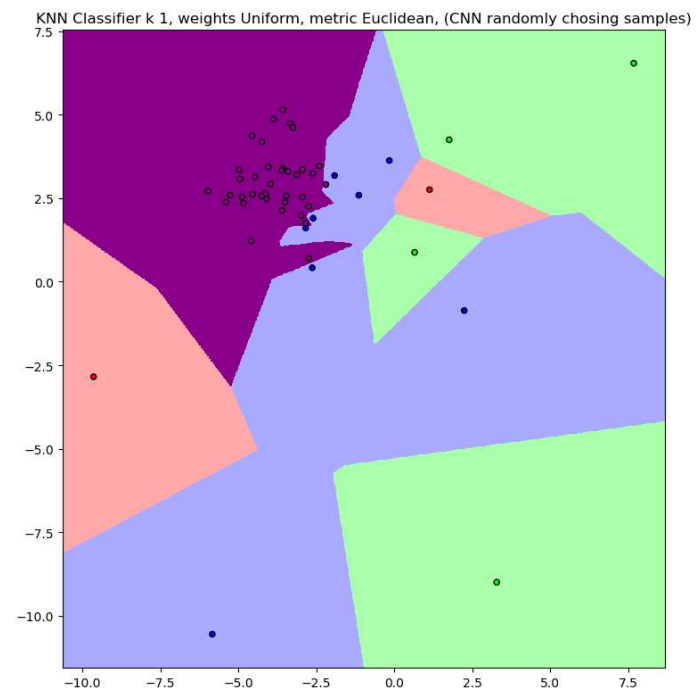
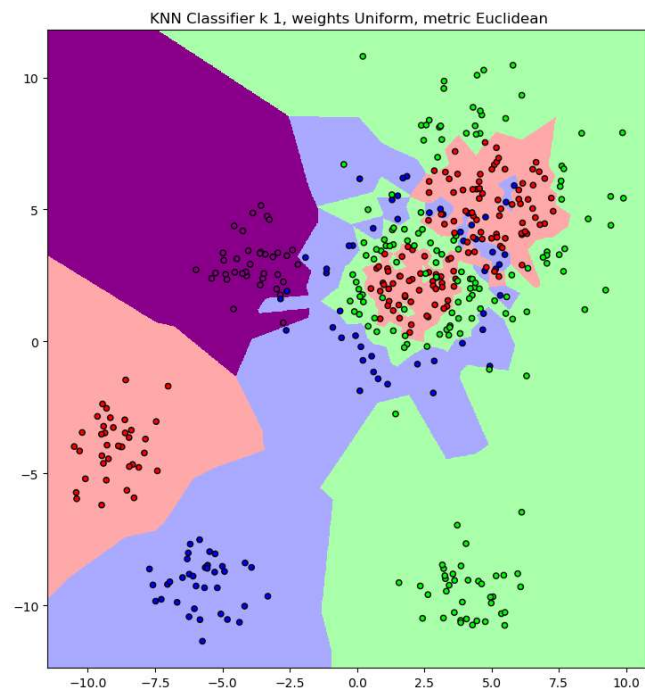
```
Anaconda Prompt - hw3_dataset1.py

(base) C:\Users\Mehmet>cd Desktop

(base) C:\Users\Mehmet\Desktop>hw3_dataset1.py

The accuracy of k=1, majority voting, Euclidean metric classifier is 82%

The accuracy of k=1, majority voting, Euclidean metric classifier (CNN randomly choosing samples) is 92%
```



Results for the second dataset are below:

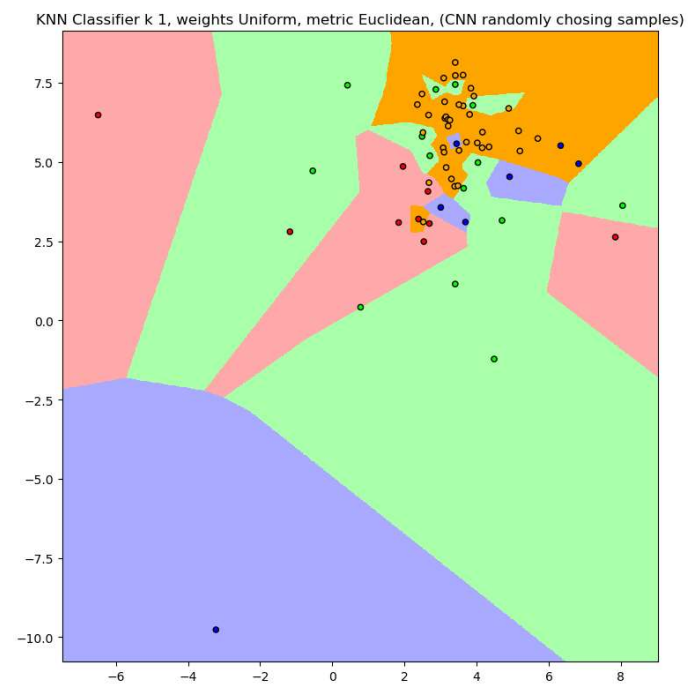
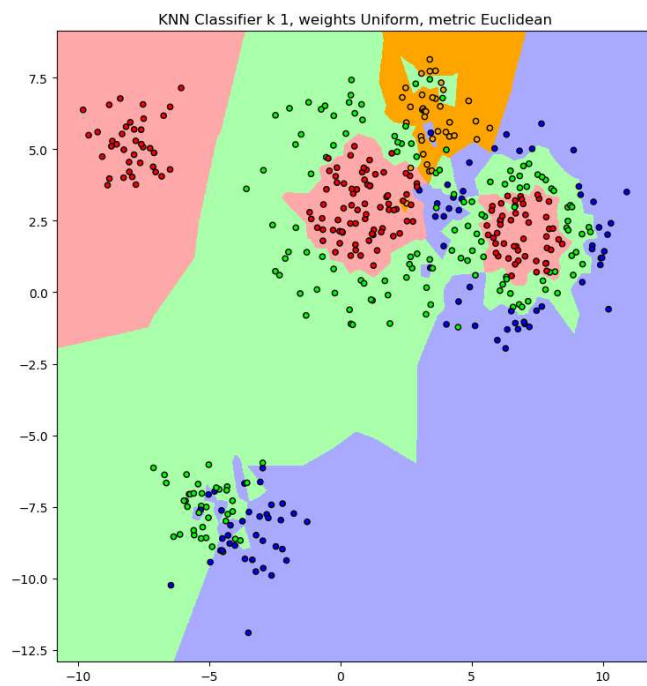
```
Anaconda Prompt - hw3_dataset2.py

(base) C:\Users\Mehmet>cd Desktop

(base) C:\Users\Mehmet\Desktop>hw3_dataset2.py

The accuracy of k=1, majority voting, Euclidean metric classifier is 79%

The accuracy of k=1, majority voting, Euclidean metric classifier (CNN randomly choosing samples) is 52%
```



Results for the third dataset are below:

```
Anaconda Prompt - hw3_dataset3.py

(base) C:\Users\Mehmet>cd Desktop

(base) C:\Users\Mehmet\Desktop>hw3_dataset3.py

The accuracy of k=1, majority voting, Euclidean metric classifier is 78%

The accuracy of k=1, majority voting, Euclidean metric classifier (CNN randomly choosing samples) is 100%
```

