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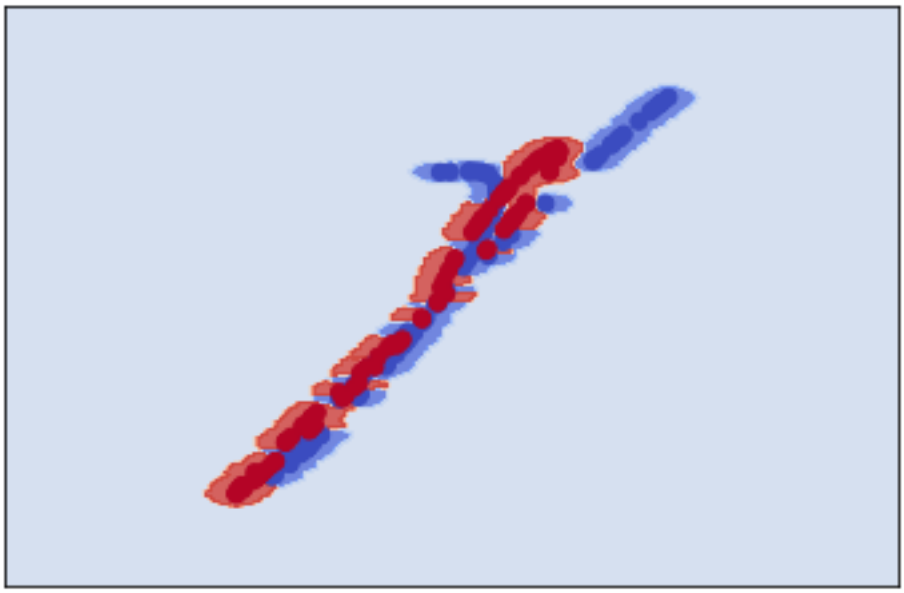
CSCI 5521

Extra Credit Written Responses

A. The accuracy and decision boundary plot:
sigma_pool = [0.00001,1.0,0.8]

```
In [2]: runfile('/Users/kiavang/CSCI5521/extra_programming/extra_credit.py', wdir='/Users/kiavang/CSCI5521/
extra_programming')
Reloaded modules: MyKernelPerceptron, visualization, simulate_data
Accuracy on the simulated data is 1.00
Accuracy on the digit classification-49 is 1.00
Accuracy on the digit classification-79 is 1.00
```



B. When I increase sigma for simulated data, accuracy decreases. However, when I increase sigma for digits49 and digits 79, accuracy increases.

sigma_pool = [0.5,0.1,0.1]

```
In [3]: runfile('/Users/kiavang/CSCI5521/extra_programming/extra_credit.py', wdir='/Users/kiavang/CSCI5521/
extra_programming')
Reloaded modules: visualization, simulate_data, MyKernelPerceptron
Accuracy on the simulated data is 0.59
Accuracy on the digit classification-49 is 0.09
Accuracy on the digit classification-79 is 0.06
```