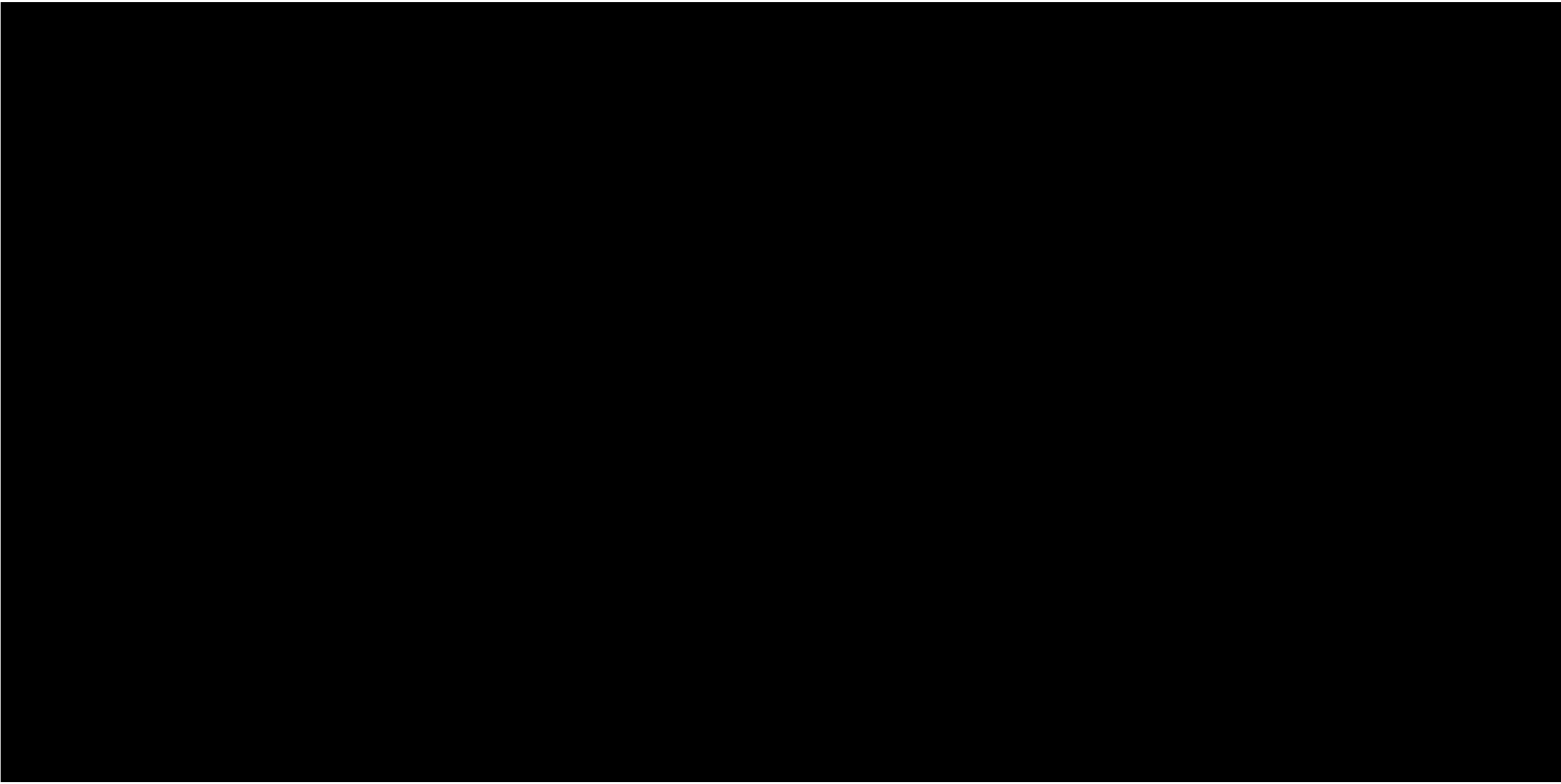




Machine Learning for Applications in Computer Vision

Support Vector Machines

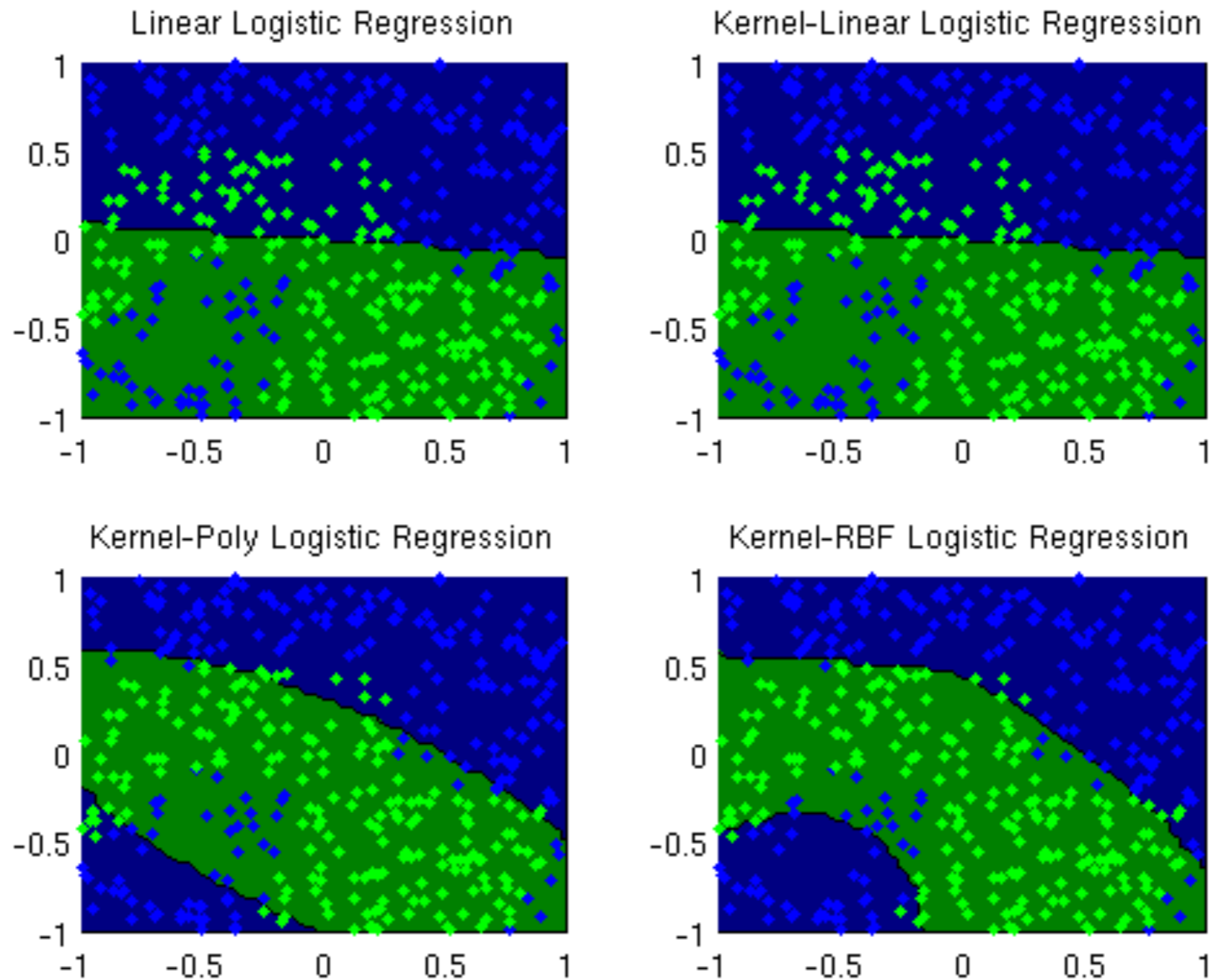
SVM demo



courtesy: [youtube.com/TeamGrizzly](https://www.youtube.com/TeamGrizzly)



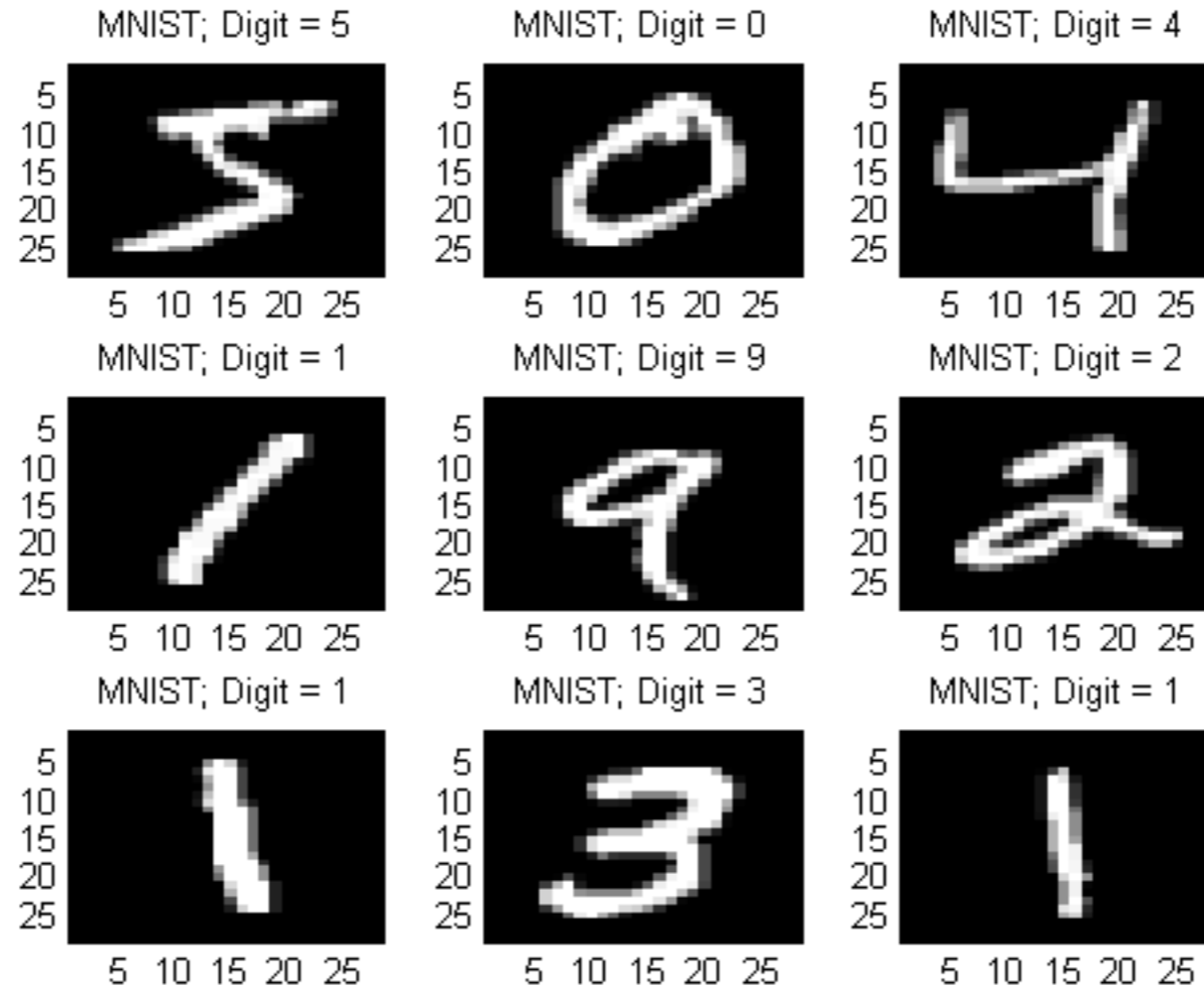
Kernels



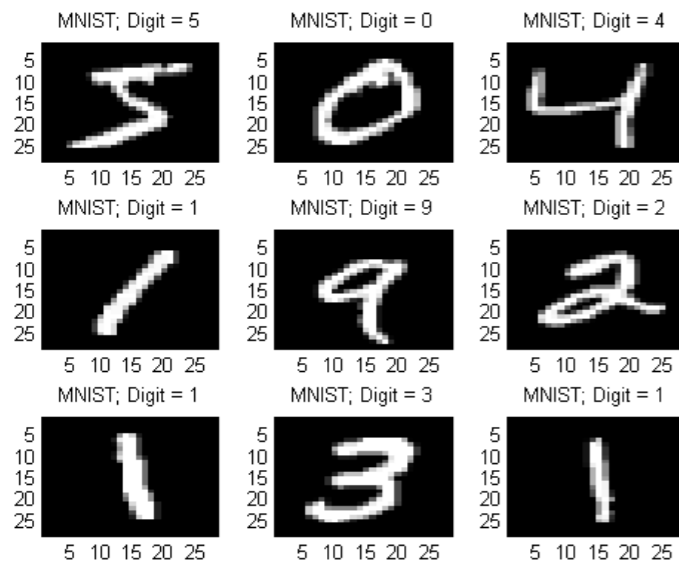
courtesy: ubc.ca



MNIST



MNIST



assignment: final project in a nutshell

- get the MNIST dataset
- grab whatever Python SVM lib you like (scikit-learn)
- decide what kernel to use
- train with training set
- use test set to evaluate your performance

report

- what's the objective?
- what's the dataset?
- (how) did you modify it (subtract mean, normalize)?
- what method do you use and why?
- what experiments do you run?
- what are the results?
- compare them with the state-of-the-art results
- give reasons why your method performed well / poorly
- don't forget citations

