

Project plan

Group.....95..... supervised byPawel.....

Selected paper:Cluster Kernels for Semi-Supervised Learning.....

Group members:

1.....Jonatan Cerwall..... 2.....Daniel Levy Trochez.....
3.....John Björkman Nilsson..... 4.....Emma Nimstad.....

Scope of the project (please indicate clearly which tasks account for the desirable grade higher than E)

1. Implement all kernels described in the paper - mixture model kernel, random walk kernel, kernel by clustered representation and their new extension of cluster kernel
2. Compare results for these different kernels with the results presented in the paper, and evaluate (higher grade ~C)
3. Compare with performance of SVM and RVM (~C)
4. Evaluate the performance on a new high dimensional data set (proposed: handwritten letters) and how the results depend on kernel parameters and the number of labelled data points (~A)
5. Discuss the proposed cluster kernel method, both strengths and weaknesses (~A)

With the tasks presented in the scope, we aim at an A

Division of workload

<i>Student name</i>	<i>Scope of responsibilities, tasks in the project</i>
1. Jonatan Cerwall	Implement random walk kernel + SVM and RVM
2. Daniel Levy Trochez	Implement mixture model kernel + effect of number of labelled data points
3. John Nilsson	Implement cluster kernel + report editor
4. Emma Nimstad	Implement clustered representation kernel + parameter evaluation