MicroArray gene expression training set

Gene weights using SVM $w_i$

Features: Pathways

$P = \sum_{i=1}^{n} w_i g_{ik}$

Train SVM

GPF

Pathway information (KEGG, C2..)

Enriched pathways using GSEA

Features: Leading edge genes $g_{ik}$

GLEG

Prediction for patient
MicroArray gene Expression
Training set

Gene weights using SVM $w_i$

Features: Pathways

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Train SVM

GPF

Pathway information (KEGG, C2+)

Enriched pathways using GSEA

Features: Leading edge genes $g_{ik}$

GLEG

Prediction for patient

New patient

Features:
- Pathways
- Leading edge genes

Train SVM

Leading edge genes $g_{ik}$