Machine Learning Homework 4: Linear Models for Classification

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新版

1 Linear Discriminant Analysis: Maximum Class Separation

Show that maximization of the class separation criterion given by $m_2 - m_1 = \mathbf{w}^{\mathbf{T}}(\mathbf{m_2} - \mathbf{m_1})$ with respect to $\mathbf{w}$, using a Lagrange multiplier to enforce the constraint $\mathbf{w}^{\mathbf{T}}\mathbf{w} = \mathbf{1}$, leads to the result that $\mathbf{w} \propto (\mathbf{m_2} - \mathbf{m_1})$.

$$x_{1:N} \; and$$

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https://github.com/2catycm/SUSTech-Machine-Learning-Lab-Solutions/blob/main/Theory-Homework-Solution/H4-Classification/P__Homework4__%E5%8F%B6%E7%92%A8%E9%93%AD.pdf

https://github.com/2catycm/SUSTech-Machine-Learning-Lab-Solutions/raw/main/Theory-Homework-Solution/H4-Classification/P__Homework4__%E5%8F%B6%E7%92%A8%E9%93%AD.pdf

https://github.com/qingconglaixueit/tuchuang/raw/main/blogsSourse/githubUseage/github4.png

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