Solution

April 30, 2020

Lecture 17

$$
\begin{cases}
\gamma_1 \frac{w}{\|w\|} = x_1 - x_0 \\
w^\top x_0 = 0 \\
w^\top x_1 = 1
\end{cases}
$$

$$
\Longrightarrow \gamma_1 \frac{w^\top w}{\|w\|} = w^\top x_1 - w^\top x_0 = 1
$$

$$
\Longrightarrow \gamma_1 \frac{\|w\|^2}{\|w\|} = 1
$$

$$
\Longrightarrow \gamma_1 = \frac{1}{\|w\|}
$$

Lecture 18