Problem Set 2 – Supervised Learning

DS598 B1 – DL4DS

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Problem 2.1

To walk "downhill" on the loss function (equation 2.5), we measure its gradient with respect to the parameters ϕ_0 and ϕ_1. Calculate expressions for the slopes $\partial L/\partial \phi_0$ and $\partial L/\partial \phi_1$.

Problem 2.2

Show that we can find the minimum of the loss function in closed-form by setting the expression for the derivatives from problem 2.1 to zero and solving for ϕ_0 and ϕ_1.