Background - videos on convexity, directional derivatives, gradient descent

Fraida Fund

Last week, we said that one of the "ingredients" in the "recipe" for supervised machine learning is a *training algorithm*, which we use to find model parameters that minimize the loss function. This is fundamentally an *optimization* problem, and in our discussion we will assume some background knowledge of the foundational math concepts for optimization.

If you have not encountered these concepts before - convexity, directional derivatives, gradient descent - please watch these short videos before our lecture (note: subtitles are available). Ask any questions you have on our Q&A site.

Objective function: convexity

Objective function: differentiability, the first order

Objective function: gradient and descent