15. Regularization

*What’s regularization, and what’s the difference between L1 and L2 regularization?*

﻿

﻿Regularization in machine learning is the process of regularizing the parameters that constrain, regularizes, or shrinks the coefficient estimates towards zero. In other words, this technique discourages learning of a more complex or flexible model, avoiding the risk of overfitting. Regularization basically adds the penalty as model complexity increases, which can help avoid overfitting.

﻿

﻿L1 effectively removes features that are unimportant, and doing this too aggressively can lead to underfitting. L2 weighs each feature instead of removing them entirely, which can lead to better accuracy. Briefly, L1 removes features while L2 doesn’t, and L2 regulates their weights instead.

*key words: Coef's, Ridge, Lasso*