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Deep Learning Lab Course
Machine Learning and Computer Vision Track
Exercise 5

Implementation:

I have implemented three functions
random_search: Random search implementation, returns mean
performance and runtime
bayesian: Bayesian optimization implementation, returns mean
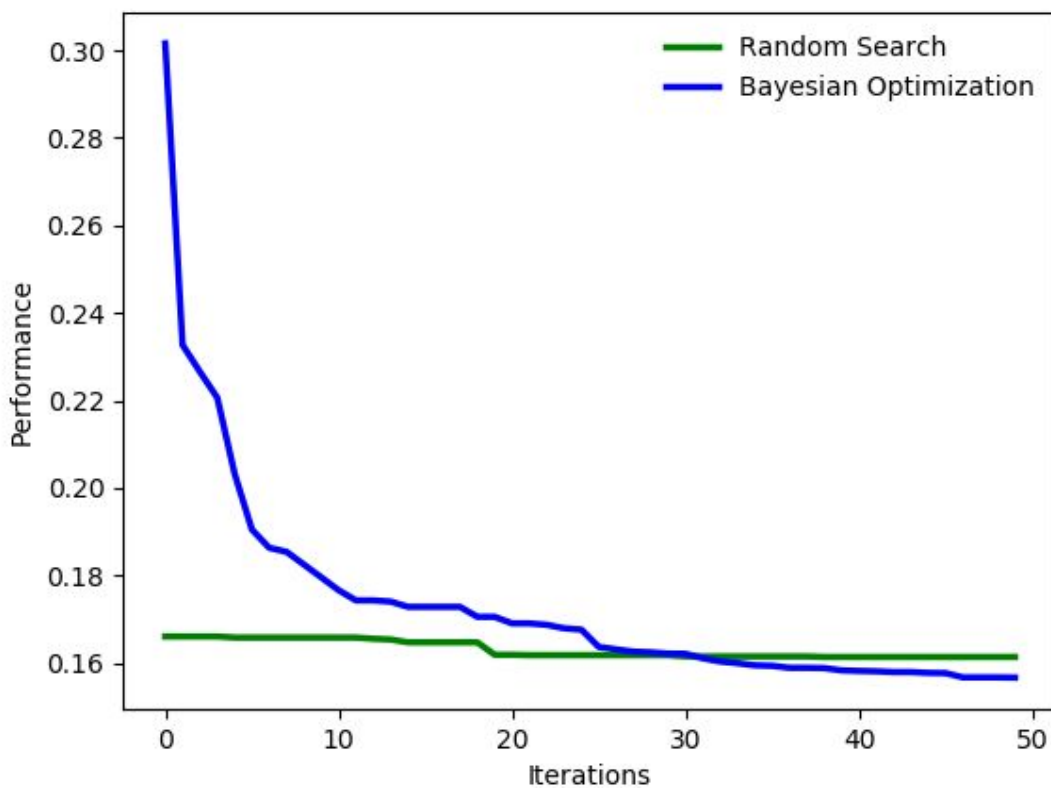performance and runtime
plot_and_save: plot the line chart and save it at the desired path

Performance

Random search could performs better at the start due to a random guess, while the bayesian optimization performs better in a long run as it takes previous performance into account.

Random search performed better in our case but there was not much improvement

Random Search vs Bayesian Optimization

Runtime

Random search takes a lot of time as compared to bayesian but this time is still very small as compared to the actual runtime

Random Search vs Bayesian Optimization