Knowledge Gradient for Constrained Problems

https://emruur.github.io/BOLeiden/

Group 8

Regular Acquisition Functions

- Aim to find the maximum in a single step

- Do not capture the value of the information gained from sampling a solution

- **Where is the maximum of our function?**

Knowledge Gradient

- Sampling at a point provides some information to later time steps

- Simulates a one step lookahead from our sampling point

- **If I sample next at point x what's the expected increase in my best predicted value after updating the GP?**