# PROJECT TITLE

## NON-TECHNICAL EXPLANATION OF YOUR PROJECT

Using Bayesian Optimization we want to test different acquisition functions, checking which leads to maximising Y from the dummy function in fewest iterations.

## DATA

We generate a dummy function to test the acquisition functions against.

## MODEL

We make use of both PyTorch ‘SingleTaskGP’ and ‘ExactMarginalLogLikelihood’.

## HYPERPARAMETER OPTIMSATION

We test acquisition functions UCB, EI and NEI. Parameters for tuning include, initial data and number of loops run (n\_runs). Clearly the model performs better with increased runs. We clearly show that given a noisy dummy function, using the noisy acquisition function leads to higher Y values in fewer steps:

