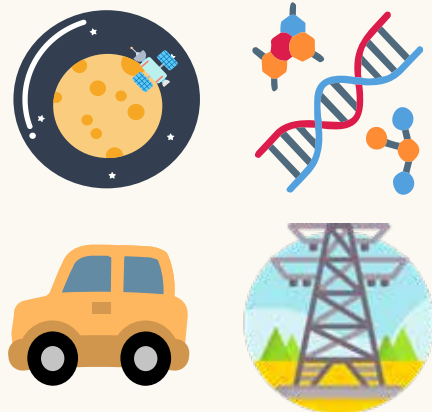


## Construct Offline Datasets

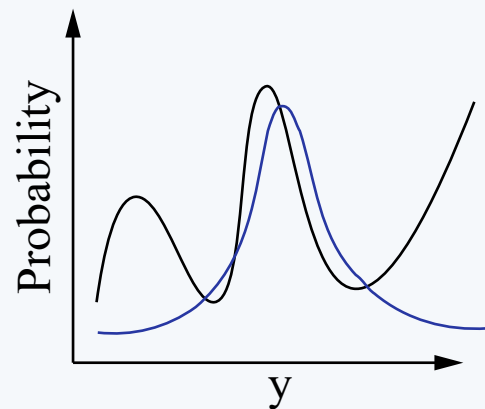
— Sampled distribution

— Original distribution

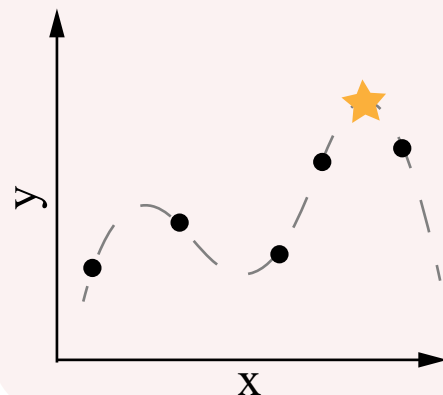
Tasks



Sample



Offline Dataset



$$\{(\mathbf{x}_i, y_i)\}_{i=1}^N$$

## Offline Optimization & Find Solutions for Online Application

— — — Black-Box function

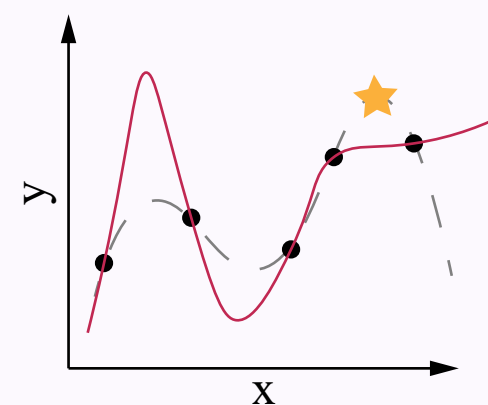
• Offline data

— Surrogate model

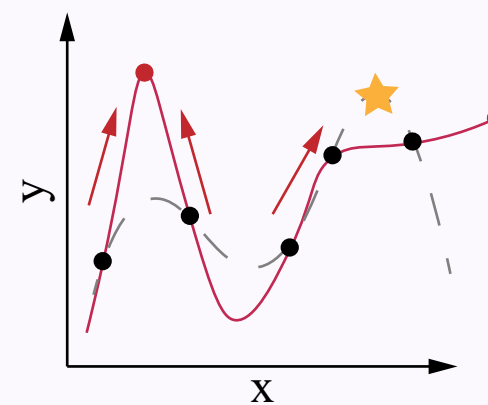
• Best score found by Offline BBO

★ Optimum

Offline Optimization Method

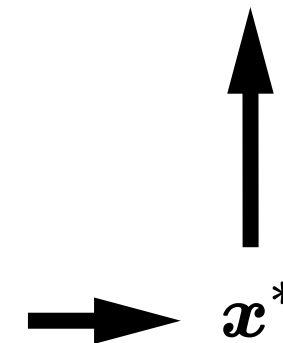


(1) Learning Surrogate Model



(2) Optimization

Online Application



Recommendatory Solutions

$\mathbf{x}^*$