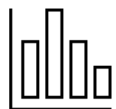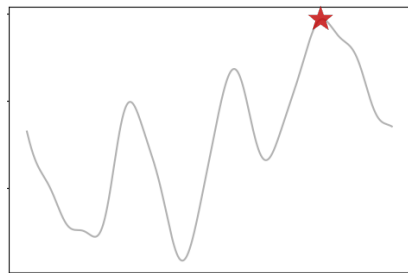# Bayesian Optimization for AutoML
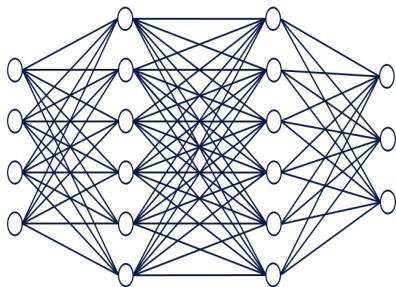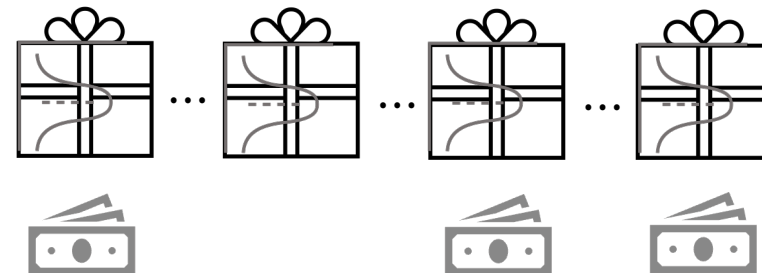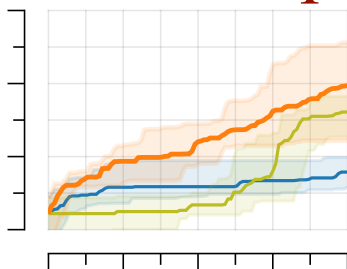

Varying evaluation costs

Adaptive stopping time

Key idea

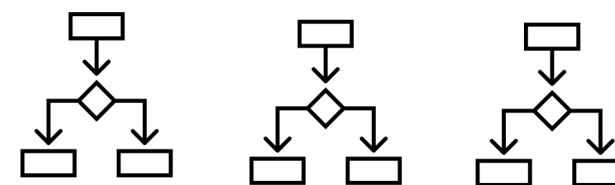Link to Pandora's Box problem and Gittins index theory

Impact

PBGI

Novel acquisition function and stopping rule w/ competitive empirical performance

"Cost-aware Bayesian Optimization via the Pandora's Box Gittins Index."

Future potentials

Bayesian optimization w/ multi-stage feedback

"Cost-aware Stopping for Bayesian Optimization."

Gittins Index vs Baselines on LCBench

Qian Xie (Cornell)