

Preference-Based Bayesian Optimization in High Dimensions with Human Feedback

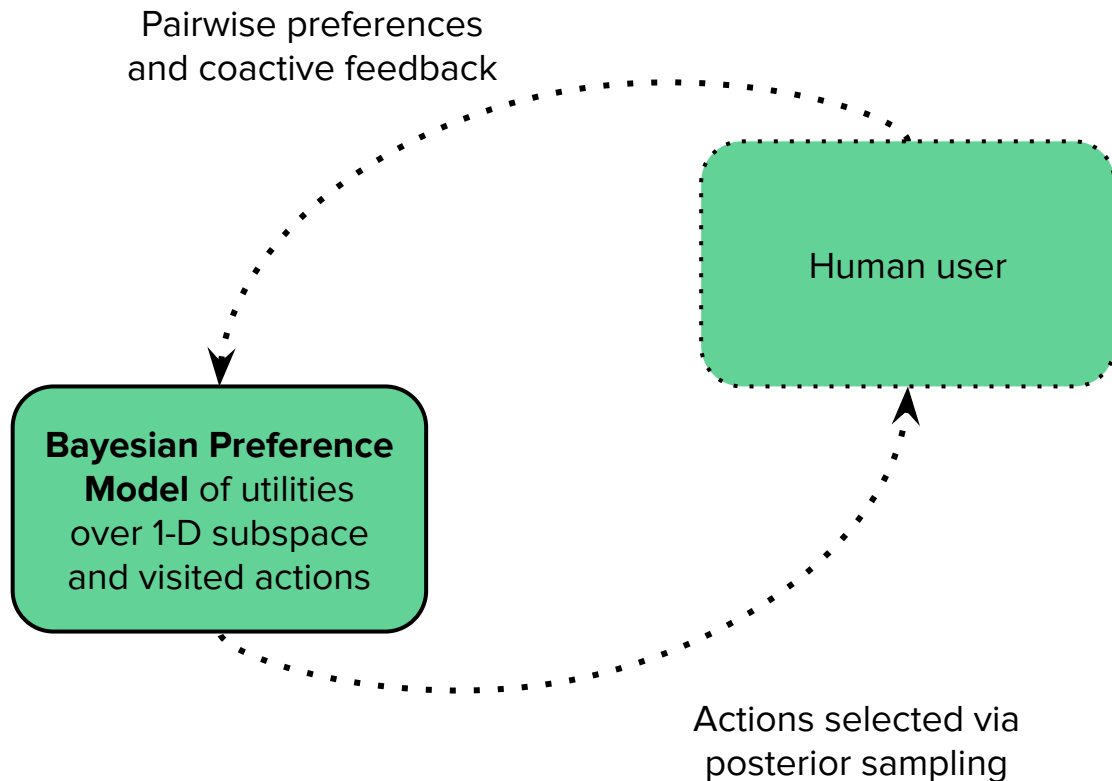
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LineCoSpar Algorithm

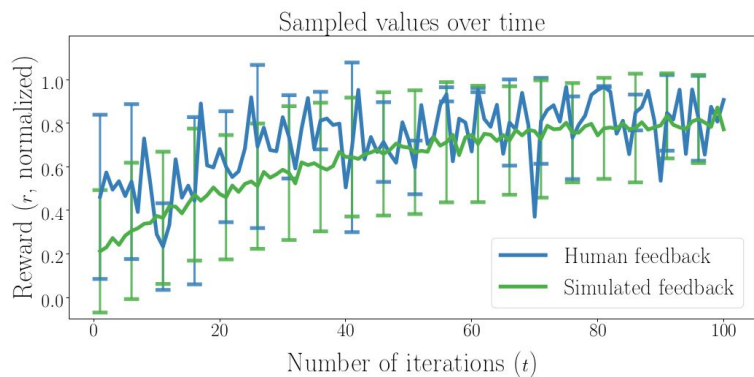
- Gaussian process-based model of the underlying utilities
- Iteratively update the posterior from preference feedback
- Learn in high dimensions via 1-D subspaces

At every iteration:



Validated in User Studies

Cartpole Simulation (4-D)



Wearable Exoskeleton (6-D)

