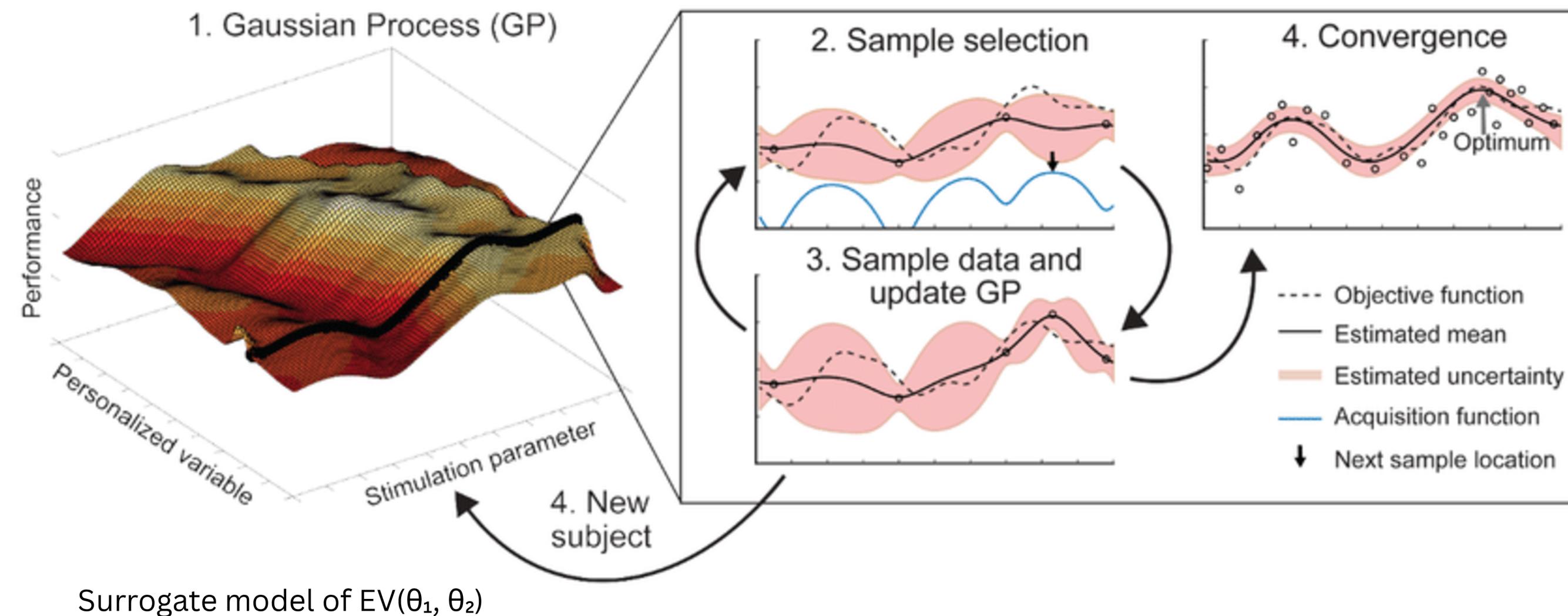


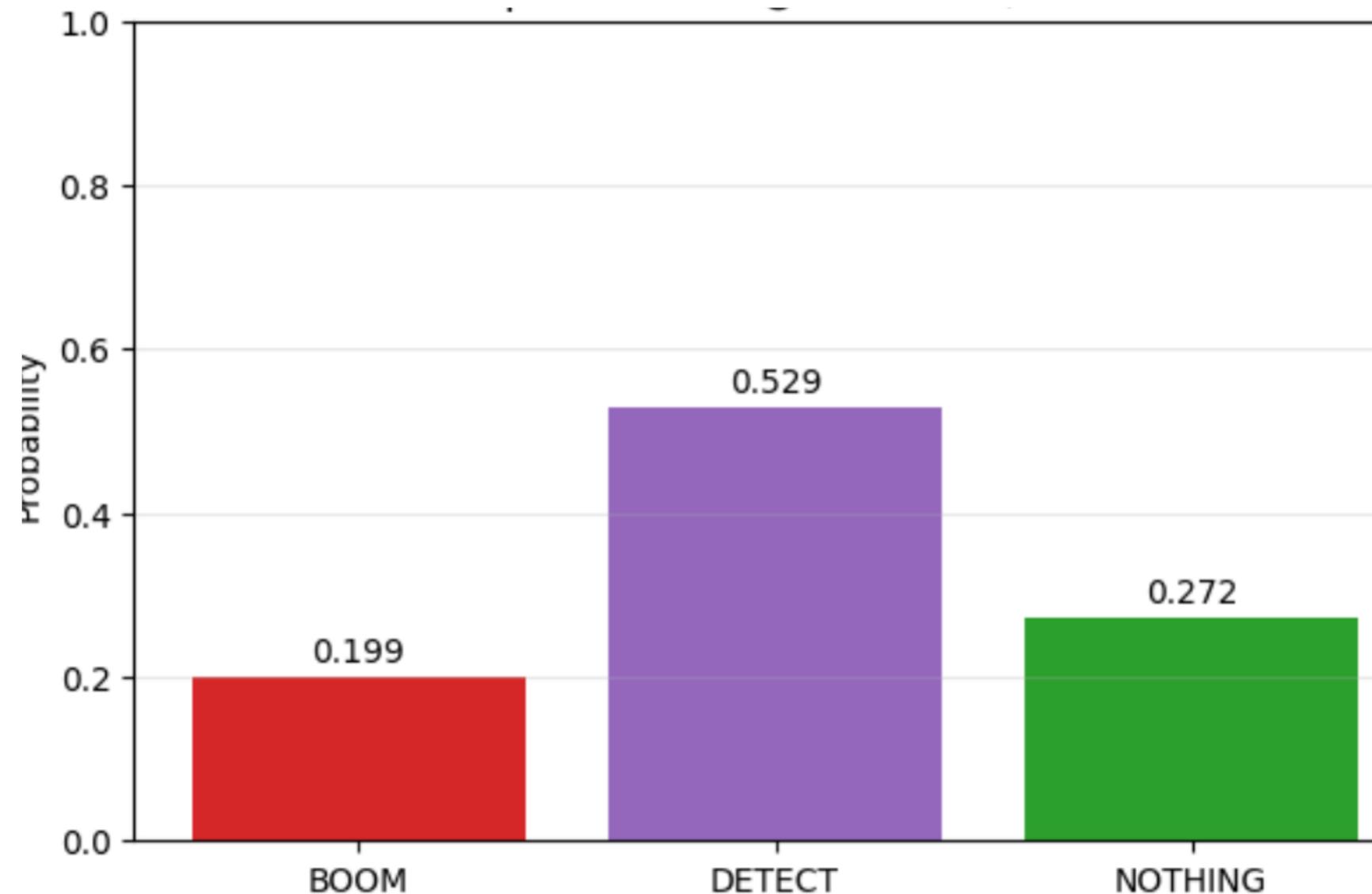
Team 3: aQarium

Bayes optimization algortihm



Bayesian optimization balances exploration and exploitation to find the optimal parameters with minimal evaluations.

Results of the Optimization



Optimal angles: $\theta_1 = 1.099557 \text{ rad}$
 $\theta_2 = -1.099557 \text{ rad}$

EV Score (Bayes-opt): 2.19880

EV Score (final confirm): 2.02709

Shots: 20000

- 00: 1477
- 01: 3971
- 10: 10578
- 11: 3974

The Curse of Efficiency

- Testing four chests at a time
- When parchment is present we conduct a measurement
- In total 8 measurements necessary
- Problem: Works only in sparse matrix
- 2D binary search probably better
- $EV^* = 2.02709/8 = 0.253$

