

Let's Try Some Bandits (practical)

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Overview

We have a set multi-armed bandits inspired by real data (obtained from our Dynamic Creative Optimization system).

Stochastic with reward either 0 or 1 (Bernoulli bandit)
Budget-limited (from 500 up to 30000 pulls)

10 stationary cases

10 non-stationary cases (multiple segments with constant probability)

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Practical Work

- 1. Download the code, test it executes successfully
- 2. Implement and measure the performance of bandit policies:
 - a. Epsilon-greedy
 - b. UCB1
 - c. Thompson sampling
 - d. (advanced) UCB-Tuned
- 3. Test different algorithms' parameters
- 4. Own ideas for further improvement?

Use Main.py to run and configure your experiment Add your bandit policies to Agent.py

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