American Options Pricing Approaches

May 8, 2025

Abstract

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1	Introduction				

Introduction

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2 Least-Squares Monte Carlo [1]

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- 3 RL methods
- 3.1 Least-Squares Policy Iteration [2]

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3.2 Other RL methods

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4 Upper Bound (via dual problem)

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- 5 RL vs LSMC
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References

- [1] Eduardo S. Schwartz Francis A. Longstaff. "Valuing American Options by Simulation: A Simple Least-Squares Approach". In: The Review of Financial Stlrdies 14.1 (2001), pp. 113–147.
- [2] Yuxi Li, Csaba Szepesvari, Dale Schuurmans. "Learning Exercise Policies for American Options". In: Proceedings of the Twelfth International Conference on Artificial Intelligence and Statistics. Ed. by David van Dyk, Max Welling. Vol. 5. Proceedings of Machine Learning Research. Hilton Clearwater Beach Resort, Clearwater Beach, Florida USA: PMLR, 16–18 Apr 2009, pp. 352–359. URL: https://proceedings.mlr.press/v5/li09d.html.