Gradient learning for a buyer seller game

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We examine a buyer seller game for a monopoly. Traditionally, the problem is modeled as a one-period Bayesian game, where the incomplete information about the buyers' utilities is handled with some subjective probability distribution. Here we suggest an iterative online scheme to solve the problem. The scheme can be seen as gradient adjustment, and it can be done with limited information and so that it benefits both the seller and the buyers. Our method uses special features of the problem and it is easily implementable.

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