



Over-bidding Strategies in Combinatorial Auctions

Combinatorial auctions (CAs) are auctions in which bidders can place bids on combinations of items (packages) rather than just individual items. CAs are commonly used to allocate multiple, indivisible goods to multiple bidders. CAs allow bidders to express complex preferences on the space of all bundles of products, taking into account that goods can be complements or substitutes. CAs have found widespread use in practice, e.g. radio spectrum licenses, procurement of industrial products, and allocation of TV ad slots.

However, the behavior of bidders in CAs is not fully understood. In many cases, the incentive properties are missing and bidders may play strategies to increase their revenue. In this thesis, we study the overbidding strategy in CAs, where bidders prefer bidding over the accurate valuation of their interested items.



The main task of this project is to study the existence of over-bidding strategies in CAs and how to design a mechanism to prevent over-bidding.



Requirements: Prior knowledge in game theory, solid background in algorithm, or programming experience.

Interested? Please contact us for more details!

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