

Squashing

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References:

- "Multi-score Position Auctions" (Charles et al. (2016) WSDM'16)
- "Revenue Analysis of a Family of Ranking Rules for Keyword Auctions" (Lahaie and Pennock (2007) EC'07)
- "A Structural Model of Sponsored Search Advertising Auctions" (Athey and Nekipelov (2011) Working Paper)

Squashing + GSP:

- Let b_1, b_2, \dots, b_I advertisers bids
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- **Pricing**: let $s_1^\theta \times b_1 > s_2^\theta \times b_2$. Then

$$Price_1 = \frac{b_2 \times s_2^\theta}{s_1^\theta}$$

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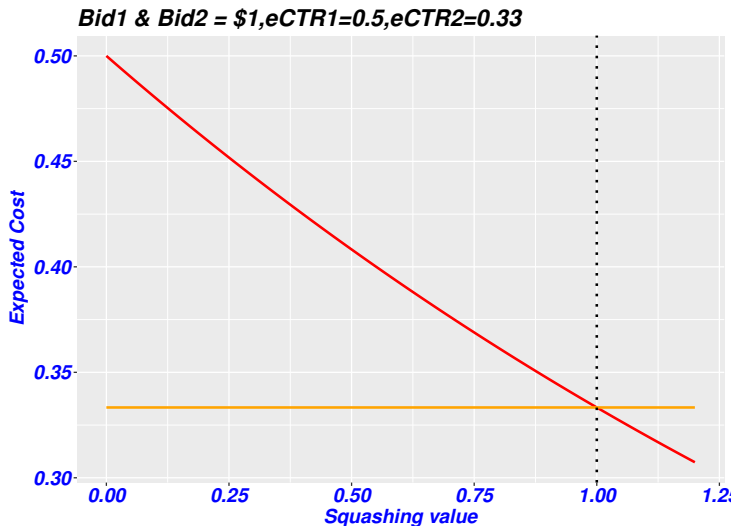
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- **Expected Cost** : $eCost_1 = Price_1 \times CTR_1$.

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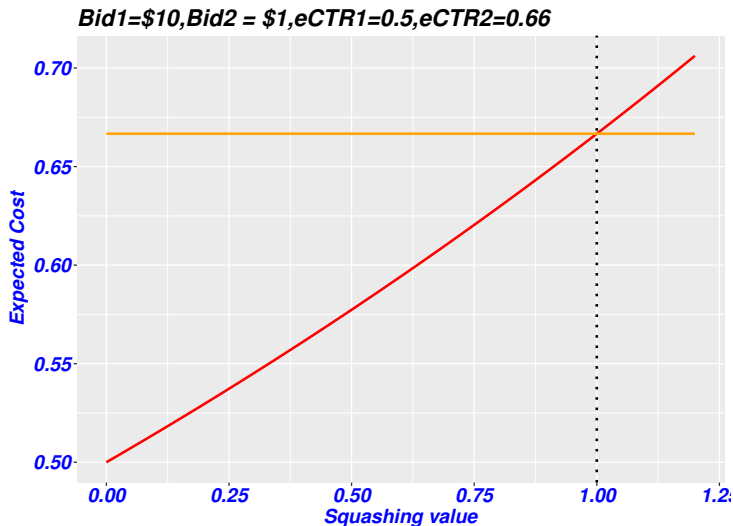


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