

Welfare Maximization in Online Two-sided Marketplaces

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ABSTRACT

Recent years have witnessed the rise of many successful e-commerce marketplace platforms like AirBnB, Uber/Lyft, and Upwork, where a central platform mediates economic transactions between buyers and sellers. Some common features that distinguish such marketplaces from more traditional marketplaces are search and discovery of the service providers which could result in asymmetric matching of services; sharing of a service by multiple users such as ride-sharing; and handling different preferences such as patience, desired level of service expressed by participating agents. In this talk, I will summarize our work on different welfare maximizing strategies arising out of the aforementioned scenarios.

BIOGRAPHY

Sreenivas Gollapudi is a Research Scientist at Google AI. He leads a team bringing algorithms and machine learning together to build better geo products in Google. Earlier, as a Researcher at Microsoft Research, he worked on a wide-ranging area spanning web search and online monetization, social network analysis, and e-commerce. His research interests are in data mining,

algorithms, and game theory. He published over 60 papers in several conferences like STOC, SIGIR, KDD, WWW, and ICML. He also serves on the review committees for these conferences.



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