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978-1-108-48076-5 — Auction Theory for Computer Networks
Dusit Niyato , Nguyen Cong Luong , Ping Wang , Zhu Han
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Auction Theory for Computer Networks

Do you have the tools to address recent challenges and problems in modern computer networks? Discover a unified view of auction theoretic applications and develop auction models, solution concepts, and algorithms with this multidisciplinary review. Devise distributed, dynamic, and adaptive algorithms for ensuring robust network operation over time-varying and heterogeneous environments, and for optimizing decisions about services, resource allocation, and usage of all network entities. Topics including cloud networking models, MIMO, mmWave communications, 5G networks, data aggregation, task allocation, user association, interference management, wireless caching, mobile data offloading, and security. Introducing fundamental concepts from an engineering perspective and describing a wide range of state-of-the-art techniques, this text is an excellent resource for graduate and senior undergraduate students, network and software engineers, economists, and researchers.

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