

# Compute Choice

Devavrat Shah

MIT, Cambridge, USA  
devavrat@mit.edu

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## Abstract

In this talk, we shall discuss the question of learning distribution over permutations of  $n$  choices based on partial observations. This is central to capturing the so called “choice” in a variety of contexts: understanding preferences of consumers over a collection of products based on purchasing and browsing data in the setting of retail and e-commerce, learning public opinion amongst a collection of socio-economic issues based on sparse polling data, and deciding a ranking of teams or players based on outcomes of games. The talk will primarily discuss the relationship between the ability to learn, nature of partial information and number of available observations. Connections to the classical theory of social choice and behavioral psychology, as well as modern literature in Statistics, learning theory and operations research will be discussed.

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