

Keynote speaker: Julian McAuley, Assistant Professor, Computer Science and Engineering, UCSD

Understanding Opinions and Preferences in Product Networks

ABSTRACT: To recommend products to users, not only must we understand their preferences toward certain products, but we must also understand how products relate to each other. For example, if a user is browsing pants on Amazon, we may wish to recommend "substitute" goods (such as other pants), as well as "complement" goods (such as matching shirts or shoes). Identifying such notions of product "relatedness" is key to designing useful recommender systems, as they allow us to produce recommendations that are relevant to a user's current search. In this talk I will discuss ongoing work to automatically infer relationships between products from the text people write, their preferences, and even the visual appearance of the products they consume. I will demonstrate the effectiveness of such models on a large co-purchasing graph from Amazon, consisting of millions of products connected by hundreds of millions of links.