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**ABSTRACT:**

In this thesis, I examine the causal relationships among products, social influence and network embedded human behaviors, in the context of social advertising. Social advertising places social cues (e.g., likes) in ads, utilizing the power of social influence (the effects of social cues in ads) to encourage ad engagement. I collaborate with a social networking app for a large-scale randomized field experiment on its social ads. In the experiment, the presence and the number of social cues were randomly assigned among 57 million ad-user pairs (more than 37 million subjects and across 71 products in 25 product categories). Integrating the experimental evidence and the data of individuals, products, ads and network structures, my studies address the incentives, magnitude, contagion patterns and viral factors (i.e., characteristics of products, behaviors and individuals) of social influence in social advertising and product adoptions.