KDD 2016 Speakers

Building User Profiles from Online Social Behaviors, with Applications in Tencent Social Ads

Ching Law: GM Social Ads / Tencent

Tuesday, August 16 - 10:00 am to 12:00pm (Yosemite)

Applied Data Science Invited Talks

The QQ (800M monthly users) and Wechat (700M monthly users) are the two largest instant messaging / social networks in China. Tencent Social Ads is the advertising system for both Wechat and QQ, serving well over 10B page views per day, for hundred million daily users.

We strive to understand as much as possible on our users' multiple aspects, so as to serve the best personalized ads for them. The rich user behaviors on Tencent's many products lay a solid foundation in user profiling. We develop audience targeting on many dimensions, including demographics, interests, intents, transactions, physical locations, and access environment, etc.

In this presentation, we will share our experience in large-scale user data mining for audience targeting, and discuss the challenges we face and the solutions we have employed:

- Some demographics data are obtained from user input, and thus would have gaps in both accuracy and coverage. We will discuss the techniques in calibrating and verifying these data.
- We infer user interests from their social behaviours. For example, most QQ groups are not labelled properly, but by applying a large-scale topic model on the QQ memberships, we can effectively classify most QQ groups into an interests taxonomy. We also infer user interests from user's physical location check-ins and uploaded photos.
- User data can be collected from many diverse sources, including behaviors in various Tencent products, click and conversion in ad platform, and even seed customers collected by advertisers. We'll discuss the systems to merge these diverse data to provide a coherent view for our advertisers.
- High quality user labels are usually sparse. We implemented an algorithm for advertisers to reach more potential customers through user similarity computation based on user features as well as social graph explorations. We'll describe the system's impact on actual advertising campaigns.
- Top advertisers demand rich audience targeting solutions in combination of their own customer data, Tencent's platform users data, and possibly other 3rd-party data. We'll discuss the data exchange platform that can facilitate various data applications together with 3rd-party DSPs and DMPs.

Speaker Bio

the data and technology platform for Tencent Social Ads.

Ching has over ten years of experience in digital marketing and online advertising systems. Before joining Tencent in 2012, Ching worked at Google for eight years, where he led multiple audience & contextual targeting projects in AdSense, Google dictionary and Cantonese input system.

Ching received his Ph.D. in Computer Science from Massachusetts Institute of Technology.

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