## **Computational Advertising at Scale**

Suju Rajan Criteo Palo Alto, CA s.rajan@criteo.com

## **ABSTRACT**

Machine learning literature on Computational Advertising typically tends to focus on the simplistic CTR prediction problem which while being relevant is the tip of the iceberg in terms of the challenges in the field. There is also very little appreciation for the scale at which the real-time-bidding systems operate (200B bid requests/day) or the increasingly adversarial ecosystem all of which add a ton of constraints in terms of feasible solutions. In this talk, I'll highlight some recent efforts in developing models that try to better encapsulate the journey of an ad from the first display to a user to the effect on an actual purchase.

## **BIOGRAPHY**

Suju Rajan is the VP, Head of Research at Criteo. At Criteo, her team works on all aspects of performance driven computational advertising, including, real-time bidding, large-scale recommendation systems, auction theory, reinforcement learning, online experimentation, metrics and scalable optimization methods. Prior to Criteo, she was the Director of the Personalization Sciences at Yahoo Research where her team worked on personalized recommendations for several Yahoo

products. She received her PhD from the University of Texas at Austin.



Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author.

KDD 2018, August 19-23, 2018, London, United Kingdom. © 2018 Copyright is held by the owner/author(s).

ACM ISBN 978-1-4503-5552-0/18/08.

DOI: https://doi.org/10.1145/ 10.1145/3219819.3219932