Topic models for conference session assignment: organising PRASA 2014(5)

Burke M and Sabatta D

Abstract

Conference scheduling and organising is a particularly laborious task and can be exteremely time consuming. While many online conference platforms allow manual topic selection, these can be expensive and typically still require that individual papers be scanned and lablled appropriately before being assigned to reviewers and relevant conference tracks or sessions. This paper shows how the bulk of this process can be automated using topic models. Latent Dirichlet allocation is applied to learn conference topics directly from documents, and a clustering algorithm introduced to separate these into suitably sized conference sessions, determining an appropriate session topic in the process. Conference tracks can then be scheduled by maximising the distance between these session topic, thereby avoiding potential topic conflicts in parallel tracks.