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October 17, 2019

## Providing Targeted Event Recommendations

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### Recommended Citation

Scott-Green, Henry and Rishi, Devvret, "Providing Targeted Event Recommendations", Technical Disclosure Commons, (October 17, 2019)

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## **Providing Targeted Event Recommendations**

### **ABSTRACT**

A significant portion of live event tickets go unsold, mainly due to a lack of awareness among prospective attendees. Providing relevant event recommendations to the potential audience for an event is a significant industry challenge. This disclosure describes techniques that issue personalized event or artist recommendations based on factors obtained with user permission. For example, such factors may include user history pertaining to location, entertainment, search, social media, etc.

### **KEYWORDS**

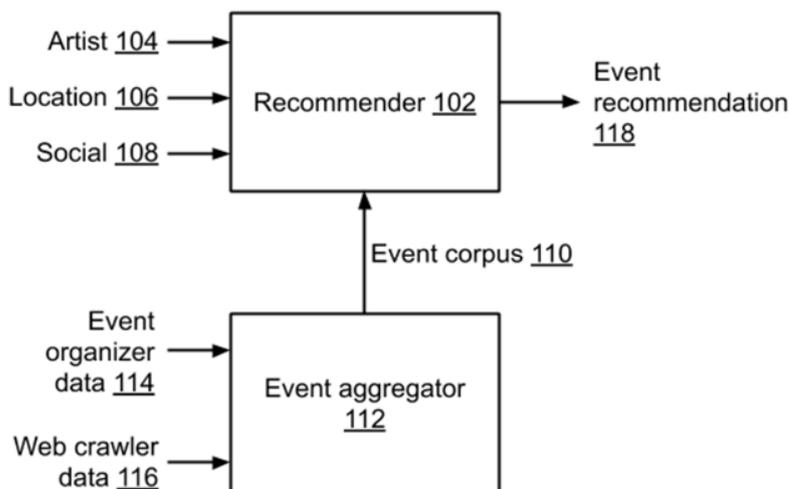
- Recommendation service
- Live events
- Concerts
- Event tickets
- Event recommendation
- Artist recommendation

### **BACKGROUND**

A significant portion of tickets to live events go unsold. This is often due to a lack of awareness of the event among the potential audience for the event. Providing relevant event recommendations to the potential audience for an event is a big challenge. Many fans would purchase tickets to events if they were aware that the event was taking place at a venue convenient for them. However, closing the awareness gap is challenging due to the fragmented industry of many players, e.g., ticketing companies, event venues, etc., each with limited data available to provide recommendations.

The discovery of local events is difficult for users and tends to be dominated by word-of-mouth. Many users prefer to be more proactively informed about events that are likely to be of interest to them.

DESCRIPTION



**Fig. 1: Provision of targeted event recommendations**

Fig. 1 illustrates the provision of targeted event recommendations, per techniques of this disclosure. A recommender (102) provides an event recommendation (118) based on a number of user-permitted input factors. The input factors may be obtained from user data, as permitted by the user. Users are provided with options to choose specific data that is utilized for event recommendations, and to limit or deny the use of user data for event recommendations. Some example factors and their use in generation of targeted event recommendations is described below.

Artist-affinity(104): The artist-affinity factor can include a number of other factors pertaining to user history, obtained with user permission. Examples of such factors are as follows.

- History of the user's views of videos on a video-hosting platforms, including videos of concerts, festivals, remixes, covers, compilations, music videos, audio-only videos, etc.
- History of user receipts, e.g., purchases of event or music tickets, as obtained from applications such as email, virtual assistants, etc.
- History of user search queries, including queries relating to live music, artist names, song names, concerts, venue locations, etc., as obtained from search engines, virtual assistants, etc.
- History of ambient music listened to by the user, as detected and identified using on-device music recognition or machine learning.

Location (106): The location factor comprises a history of user locations, e.g., location of user's home, work, frequently-visited spots, visits to event venues, etc. e.g., as obtained from map applications or on-device location sensors. Location is obtained or utilized with user permission. Location data may be processed, e.g., to aggregate locations to an area, city, county, etc. prior to being used to generate event recommendations.

Social media factor (108): The user's social media connections, obtained with user permission, can be used to suggest friends with high affinity to the artist playing at an event of interest to the user. With user permission, friends with music interests similar to the user are suggested for the purposes of attending an event. The artist-affinity factor, described above, can also be used to determine friends of similar musical tastes.

Event corpus (110): An event aggregator (112) develops a corpus of upcoming events by obtaining event data, e.g., location, time date, artists, pricing, etc., from event organizers (114) that submit data using APIs, or by crawling the web (116) to discover events. Event organizers

can be incentivized to send in data of their events by the prospect of targeted promotion of their events based on the techniques disclosed herein.

The recommender uses factors such as those listed above to provide an event recommendation (118) to the user. Recommendations can be delivered either proactively, or in response to a user query.

*Example:* A user is known to have watched a video featuring a live set from a music festival. The recommender recommends festival tickets for the next year.

*Example:* A user is known to have watched a cover of an artist Y song by artist X. The recommender recommends artist X tickets for a live event happening close to the user's home.

*Example:* A user is known to have watched highlights of a show by artist Y. The recommender recommends tickets to a live show by artist Y.

*Example:* A user is known to have visited event venue V. The user is known to have listened to music by artist Z. The recommender recommends tickets to a live show at the event venue V by artist Z.

By the techniques of this disclosure, more prospective buyers discover events they are likely to want to attend, these events are in locations they regularly visit, and they have friends to attend with — resulting in more tickets sold, and more happy users who attend concerts or events they enjoy. Advertisers that pay to provide highly targeted promotions derive a higher return-on-investment, driving additional spend on the advertising platform. Video-hosting sites, review sites, application stores, etc. can utilize the described techniques to provide organic recommendations with the aim of driving artist goodwill and ticketing revenues.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable collection of user information (e.g., information about a user's social network, social actions or activities, profession, a user's preferences, or a user's current location), and if the user is sent content or communications from a server. In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user's identity may be treated so that no personally identifiable information can be determined for the user, or a user's geographic location may be generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.

## CONCLUSION

This disclosure describes techniques that issue personalized event or artist recommendations based on factors obtained with user permission. For example, such factors may include user history pertaining to location, entertainment, search, social media, etc.