

# Tag Recommendations for SensorFolkSonomies

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## Abstract

With the rising popularity of smart mobile devices, sensor data-based applications have become more and more popular. Their users record data during their daily routine or specifically for certain events. The application WideNoise Plus allows users to record sound samples and to annotate them with perceptions and tags. The app documents and maps the soundscape all over the world. The procedure of recording, including the assignment of tags, has to be as easy-to-use as possible. We therefore discuss the application of tag recommender algorithms in this particular scenario. We show, that this task is fundamentally different from the well-known tag recommendation problem in folksonomies as users do no longer tag fix resources but sensory data and impressions. The scenario requires efficient recommender algorithms that are able to run on the mobile device, since Internet connectivity is not always available. Therefore, we evaluate the performance of ten tag recommendation algorithms and discuss their applicability in the mobile sensing use-case.