**Abstract of Thesis**

Homophily, ranging from demographics to sentiments, breeds connections in social networks, either oﬄine or online. However, with the prosperous growth of music streaming service, whether homophily exists in online music listening remains unclear. In this study, two online social networks of a same group of active users are established respectively in Netease Music and Weibo. Through presented multiple similarity measures, it is evidently demonstrated that homophily does exist in music listening of both online social networks. The unexpected music similarity in Weibo also implies that knowledge from generic social networks can be conﬁdently transferred to domain-oriented networks for context enrichment and algorithm enhancement. Comprehensive factors that might function in formation of homophily are further probed and many interesting patterns are profoundly revealed. It is found that female friends are more homogeneous in music listening and positive and energetic songs signiﬁcantly pull users close. Our methodology and ﬁndings would shed lights on realistic applications in online music services.