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# An Introduction to Retrieval and Reminiscence from Lifelog Archives at NTCIR

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## ABSTRACT

In recent years, various software and hardware tools have entered the consumer market which enable users to log data about their lives on a continuous basis. Popular examples include self-tracking devices or apps such as Fitbit or Garmin that allow users to keep track of their physical activities or to monitor their biometrics. The process of gathering such multi-modal data from multiple sources is also referred to as lifelogging.

Due to the constant stream of data being captured, lifelogging can result in the creation of large personal archives that are too large for manual organization. Consequently, automated approaches to handle such data are needed. However, due to privacy concerns, advances in the field have been limited by the lack of shared test collections.

Aiming to promote further research on novel approaches to multi-modal personal data analytics and retrieval, we organized a comparative benchmarking exercise, *Lifelog*, that ran between 2015 and 2022 as part of the evaluation conference NTCIR. Several Lifelog datasets were released and participants could work on various sub-tasks to tackle different challenges related to Lifelog retrieval. In this keynote presentation, I will give an overview of these sub-tasks and reflect on lessons learned.

## CCS Concepts/ACM Classifiers

• Information systems~Information retrieval~Evaluation of retrieval results~Test collections

## Author Keywords

Lifelogging; evaluation; information retrieval

## BIOGRAPHY

Frank Hopfgartner is Senior Lecturer in Data Science and Head of the Information Retrieval Research Group at The University of Sheffield. His research expertise is in the intersection of information retrieval and intelligent data analysis, with a specialization in the analysis and exploitation of personal data. Examples are interaction data from web search engines, recommendation systems and other information access systems, but also unstructured biometric sensor data, such as those generated by self-tracking or lifelogging devices and in healthcare contexts. Between 2015 and 2022, he has been co-organizing NTCIR Lifelog, an evaluation campaign aiming to advance the state-of-the-art in lifelogging as an application of information retrieval.


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