

# Introduction to the 9th Annual Lifelog Search Challenge, LSC'26

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## Abstract

The ACM Lifelog Search Challenge (LSC) is an annual comparative benchmarking exercise that brings together researchers in the field of multimedia retrieval to evaluate interactive search systems using a large-scale multimodal lifelog dataset. This paper presents an overview of the ninth edition of the challenge (LSC'26), held as a workshop during the ACM International Conference on Multimedia Retrieval (ICMR '26) in Amsterdam. To broaden its scope, the workshop now features three submission tracks: the traditional Challenge Track for real-time search performance, a new General Lifelog Research Track for theoretical and architectural advancements, and an additional Open Source Track aimed at enhancing reproducibility and reducing barriers to entry for new participants.

## CCS Concepts

• **Information systems** → **Search interfaces; Multimedia and multimodal retrieval; Mobile information processing systems; Search interfaces**; • **Human-centered computing** → *Interaction techniques; Interactive systems and tools; Empirical studies in interaction design.*

## Keywords

Lifelog, Interactive Retrieval Systems, Benchmarking

### ACM Reference Format:

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## 1 Introduction to ACM LSC'26

The ninth annual ACM Lifelog Search Challenge (LSC) was held as a Workshop during the ACM ICMR'26 conference in Amsterdam, The Netherlands on the 16th of June 2026. This year marked the ninth edition of the LSC, which has been held annually since 2018 and has become a key event for researchers in the field of lifelogging and multimedia retrieval since the first edition in 2018. With the LSC, our aim is to provide a platform for researchers to compare their interactive lifelog search systems in a live metrics-based challenge and to foster collaboration and knowledge sharing among researchers in the field.

LSC'26 continued to build on the success of previous editions, using a dataset spanning 18 months of multimodal lifelog data, collected by a single lifelogger, which was already established in previous editions [2, 4]. The dataset includes over 700000 images, captured approximately every 30 seconds using a Narrative Clip wearable camera. LSC 2026 marks the fifth consecutive edition to use this dataset, which was first introduced in 2022 [1]. We expect this to be the last year to use this dataset, as efforts are currently underway to extend the data by an additional 2.5 years of continuous recording, bringing the total to at least four years of data.

## 2 Novelties in 2026

To broaden the scope of the workshop, the 2026 edition of the LSC Workshop introduced two new tracks in addition to the traditional Challenge Track for real-time search performance: a General Research Track and a Reproducibility Track.



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## 2.1 General Research Track

The General Research Track intends to attract new researchers to the competition and present research that goes beyond the existing challenge, for example, via alternative approaches, tasks, and datasets. It welcomes contributions on data analysis, management, user experience, and ethical frameworks without a participating system. By including this track, LSC'26 provides a platform for presenting alternative approaches, novel datasets, and human-centered perspectives, such as health monitoring and privacy-preserving technologies. The aim of this track is to broaden the scope of the workshop beyond the challenge itself and thereby, its target audience. We understand this track as an open invitation to the broader lifelogging community to contribute to this and future editions of the workshop.

## 2.2 Reproducibility Track

The Reproducibility Track focuses on the reproducibility of research in the field, encouraging researchers to share their code and data to facilitate replication and validation of results. This track especially encourages past LSC participants to provide detailed documentation and instructions for others to reproduce their results. In addition, these open systems could be used by other researchers, lowering the barrier to entering the competition. This track is inspired by the reproducibility tracks held at other SIGMM conferences, such as ICMR<sup>1</sup> and ACM Multimedia.<sup>2</sup> We hope that this track will increase the transparency and reliability of research in the field, encourage collaboration and knowledge sharing among researchers, and reduce the barriers to entry for new researchers who may be interested in the field but do not have the resources or expertise to develop their own systems from scratch.

## 2.3 Publication Schedule

In addition, we have moved the publishing of the LSC overview paper to after the challenge, to allow for a more comprehensive overview of the challenge and its results, and to allow for the inclusion of more detailed information about the systems that participated in the challenge, as well as the results of the evaluation.

## 3 Challenge Setup

The core Search System Track remains the defining feature of the LSC. The competition was structured as a synchronous challenge where teams arranged their workstations in a semi-circle around a central scoreboard. We prepared 24 realistic tasks of three types,

presented with textual descriptions: ad-hoc/conventional topics, single known-item topics, and Q&A-type topics. For both ad-hoc and known-item topics, the results were submitted as one or more images, while the Q&A topics required the submission of a textual answer. To assess correctness beyond known-item topics, judges used the judging/scoring interface of the evaluation system DRES [3] for managing the whole challenge. A score for each topic was calculated based on accuracy and combined with the times taken for the known-item and Q&A query types, which were averaged over all topics during the competition. More details about the scoring functions can be found in [4]

<sup>1</sup><https://icmr-reproducibility.github.io/home/>

<sup>2</sup><https://acmmm-reproducibility.github.io/website/>

## 4 Conclusion

LSC 2026, in its 9th consecutive year, marks an expansion beyond the core interactive retrieval challenge with the introduction of two additional tracks. With the novelties introduced this year, we expect to increase the impact of the workshop, and we hope to grow the LSC community in the coming years.

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