

Sim4IR Session A Speakers



Keynote A
David Hawking



Paper Talks
Sebastian Günther
Yurou Zhao



Encore Talks
Claudia Hauff
Junqi Zhang
Manel Slokom

Sim4IR Session B Speakers



Keynote B
ChengXiang Zhai



Paper Talk
Pierre Erbacher



Encore Talks

*Shuo Zhang
Ben Carterette
Jin Huang
Alexandre Salle
David Maxwell*

<https://sim4ir.org>

sigir21

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The Simulation for Information Retrieval Workshop

Krisztian Balog, David Maxwell, Paul Thomas, Shuo Zhang
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The Sim4IR Organisers



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Detailed workshop information available at <https://sim4ir.org>

Homepage | sim4IR

sim4ir.org

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The Sim4IR Workshop

At SIGIR 2021

About Sim4IR

Schedule

Speakers

Call for Papers

Important Dates

Submission Guidelines

The Sim4IR Workshop at SIGIR 2021

Welcome to the Sim4IR workshop website. We're delighted that we're going to be running a workshop, co-located at [ACM SIGIR 2021](#) on simulation within Information Retrieval. This will take place on July 15, 2021.

To find out more about the workshop, click one of the links below.

- Read [about the organisers and reviewers of the workshop](#).
- Have a look at the workshop's [detailed schedule](#).
- Read about the [speakers who are participating in the workshop](#).
- Have a look at the [call for papers](#).
- Don't forget to [check the important dates!](#)
- Have a look at the [submission guidelines](#).

Any questions? Feel free to contact the organisers at sim4ir@easychair.org.

We'll be adding more information to this website as and when required.

sigir21

Hosted by [GitHub Pages](#)

Thanks to the Sim4IR Reviewers!



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Simulation and Information Retrieval

- Information Retrieval and Simulation are no strangers!
- We've been using simulation in IR since the early 1970's...



Image: Library of Congress

1973

**“Simulation Model
of an IR System”**

“...the use of simulation as an evaluative tool appears to have great potential, but it should be realised [sic] that the time and cost to develop such a tool will be great.”

Simulation and Information Retrieval

- Recently, simulation has been used to **overcome limitations of traditional test collections** – perhaps notably within in the Interactive IR world.

**Constructing
known-item test
collections**

**Analysing search
behaviours**

**Evaluating
interactive tasks
(search sessions)**

**Filling values in
a table**

**Creation of
synthetic test
collections**

**Conversational item
recommendation**

Simulation and Information Retrieval

“The main conclusion and general consensus was that simulation offers great potential for the field of IR; and that simulations of user interaction can make explicit the user and user interface while maintaining the advantages of the Cranfield Paradigm.”

WORKSHOP REPORT

Report on the SIGIR 2010 Workshop on the Simulation of Interaction

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Abstract

All search in the real-world is inherently interactive. Information retrieval (IR) has a firm tradition of using simulation to evaluate IR systems as embodied by the Cranfield paradigm. However, to a large extent, such system evaluations ignore user interaction. Simulations provide a way to go beyond this limitation. With an increasing number of researchers using simulation to evaluate interactive IR systems, it is now timely to discuss, develop and advance this powerful methodology within the field of IR. During the SimInt 2010 workshop around 40 participants discussed and presented their views on the simulation of interaction. The main conclusion and general consensus was that simulation offers great potential for the field of IR; and that simulations of user interaction can make explicit the user and the user interface while maintaining the advantages of the Cranfield paradigm.

1 Introduction

The use of simulation to evaluate retrieval systems has a long history in IR, especially before the availability of large-scale test collections developed in the 1990s [6, 20]. In recent years, simulation has mainly been used to overcome limitations of traditional test collections, in particular to evaluate adaptive or interactive IR [e.g., 22]. The different types of experiments that can be performed to examine Interactive IR may be classified into four classes [14, p.210]:

Purpose of the Sim4IR Workshop

- We want to continue the work started by Leif, Kal, Jaap, and Mark – and have a discussion about simulation in 2021! What has changed?
- New research areas (e.g., conversational search) are potentially well-suited
 - Why? Human evaluation is resource intensive, especially at scale
 - Test collections may not be able to be shared (due to privacy concerns)

What are the latest developments in simulation within the IR community?

Fully embrace simulation as a means of evaluation; discuss and collaborate on how we can develop a standard methodology around it.

Sim4IR Workshop Structure

2



Keynote
Presentations

3



Paper
Presentations

8



“Encore”
Presentations

+



Breakout
Discussions

*Split over two sessions to cater for an
international audience*



Session A Schedule

0900 CEST

1230 CEST

0915

0950

0950

1030

1040

1125

1125

1230 (ish)



Keynote A
David Hawking



Paper Talks
Sebastian Günther
Yurou Zhao



Encore Talks
Claudia Hauff
Junqi Zhang
Manel Slokom



**Breakout
Discussion &
Reporting**

Detailed information (in your timezone!) at <https://sim4ir.org/schedule>

Keynote A



How Useful are Results from Simulated Test Collections?

David Hawking

Honorary Professor, Australian National University

Keynote B



User Simulation for Information Retrieval Evaluation: Opportunities and Challenges

ChenXiang Zhai

Professor, University of Illinois at Urbana-Champaign
ACM SIGIR Salton Award Winner, 2021