

## PROGRAM

# MICROS WORKSHOP

---

April 1st, 2021 (full-day workshop)

## SCHEDEULE

All times are in the CEST time zone (UTC+2)

### SESSION 1

Chair: Ida Mele, IASI-CNR, Rome, IT

09:00 – 09:20 **MICROS Introduction** (15 min + 5 min for questions)

09:20 – 10:20 **Keynote Talk** (50 min + 10 min for questions)

Speaker: Claudia Hauff, Delft University of Technology, NL

Title: “On the analysis and training of neural IR models in the context of conversational search and recommendation”

Abstract: see page 5

10:20 – 11:00 **Coffee Break** (40 min)

### SESSION 2

Chair: Cristina Ioana Muntean, ISTI-CNR, Pisa, IT

11:00 – 12:00 **Keynote Talk** (50 min + 10 min for questions)

Speaker: Filip Radlinski, Google Research, London, UK

Title: “Natural language and mixed initiative”

Abstract: see page 5

12:00 – 12:30 **Paper presentation** (25 min + 5 min for questions)

Authors: Nikolaos Kondylidis, Jie Zou and Evangelos Kanoulas

Title: “Category Aware Explainable Conversational Recommendation”

Speaker: Nikolaos Kondylidis

**12:30 – 13:00 Paper presentation** (25 min + 5 min for questions)

Authors: Maddalen Lopez de Lacalle, Xabier Saralegi and Inhar Lopez

Title: “Reducing annotation effort for Cross-lingual Transfer Learning: The case of NLU for Basque”

Speaker: Maddalen Lopez de Lacalle

**13:00 – 14:15 Lunch Break** (1h & 15 min)

## SESSION 3

Chair: Nikos Voskarides, University of Amsterdam, NL

**14:15 – 14:45 Paper presentation** (25 min + 5 min for questions)

Authors: Abhishek Kaushik and Gareth Jones

Title: “A Conceptual Framework for Implicit Evaluation of Conversational Search Interfaces”

Speaker: Abhishek Kaushik

**14:45 – 15:15 Paper presentation** (25 min + 5 min for questions)

Authors: Tom Lotze, Stefan Klut, Mohammad Aliannejadi and Evangelos Kanoulas

Title: “Ranking Clarifying Questions Based on Predicted User Engagement”

Speakers: Tom Lotze and Stefan Klut

**15:15 – 16:15 Keynote Talk** (50 min + 10 min for questions)

Speaker: Jian-Yun Nie, University of Montreal, Canada

Title: “Goal-oriented search for dialogue and question answering”

Abstract: see page 6

**16:15 – 16:45 Coffee Break** (30 min)

## SESSION 4

Chair: Mohammad Aliannejadi, University of Amsterdam, NL

16:45 – 18:05 **Panel** (1h & 20 min)

Panelists: Julia Kiseleva (moderator), Nicholas Belkin, Claudia Hauff, Jian-Yun Nie, Filip Radlinski, and Hamed Zamani

18:05 – 18:15 **Closing** (10 min)

## PANELISTS



**Julia Kiseleva (Microsoft Research, Seattle, USA) -- moderator**

**Bio:** Julia is a Senior Researcher in Microsoft Research. Previously, she worked in different research-related roles before starting her own start-up, whose goal was to infer user satisfaction with mobile phone applications. The focus of Julia's research is understanding and predicting user objectives while they are using various interactive systems, e.g. conversational agents, personal assistants, and recommender systems.



**Nicholas Belkin (Rutgers University, USA)**

**Bio:** Nicholas Belkin is Distinguished Professor of Information Science Emeritus in the Department of Library & Information Science, Rutgers University, and Adjunct Professor at the Dhirubhai Ambani Institute of Information and Communication Technology. Previous to these appointments, he was at the Department of Information Science, The City University, London. He has held visiting positions at the University of Western Ontario, the Free University, Berlin, and the Institute for Systems Science, National University of Singapore. He was a Fulbright Fellow at the University of Tampere in 1996, and a Fulbright Senior Scholar in Croatia in 2003. He received his Ph.D. in Information Studies from the University of London (University College). Nick has served as the Chair of the ACM SIGIR, and President of the Association for Information Science and Technology (ASIST). He is the recipient of the ASIST's Outstanding Teacher award, its Research Award, and its Award of Merit. In 2015, he received the ACM SIGIR Gerard Salton Award, and in 2020 he

was made an inaugural Member of the ACM SIGIR Academy. Nick is known as one of the founders of the cognitive viewpoint in information science, and as a leader in integrating information behavior research with information retrieval research. His most recent research has focused on personalization of interaction with information, especially with respect to the nature of the task which leads people to engage in information seeking, and on methods for evaluation of whole-session search. Professor Belkin's research has been supported by many agencies, including US NSF, US Institute of Museum and Library Services, Google, DARPA, NIST, US Department of Education, the British Library Research and Development Department, and NATO.



### Claudia Hauff (Delft University of Technology, NL)

**Bio:** Claudia Hauff is an Associate Professor at the Web Information Systems group, Delft University of Technology (TU Delft) and a computer scientist by training. She received her PhD in 2010 from the University of Twente. In the past, she has worked on a variety of topics in the fields of information retrieval & data science, including query performance prediction, social search, learning to search and information retrieval for specific user groups. Together with her team she currently focuses on the areas of collaborative search, complex search, and conversational search.



### Jian-Yun Nie (University of Montreal, Canada)

**Bio:** Jian-Yun Nie is a professor at the Department of Computer Science and Operations Research, University of Montreal, and head of the RALI lab on Applied Research in Computational Linguistics. He has been working on IR for many years. His work has focused on information retrieval models, cross-language IR, web search, query suggestion and expansion and dialogue. His group was among the first to investigate the problem of query suggestion and dialogue using deep learning models. Jian-Yun Nie is on editorial board of 5 international journals (e.g. Journal of information retrieval). He has served as chair, PC chair or area chair of the major conferences in the areas of IR and NLP (SIGIR, CIKM, ACL, WWW, ...). He received several best paper awards, and a Test of Time honorable mention award at SIGIR.



### Filip Radlinski (Google Research, London, UK)

**Bio:** Filip Radlinski is a research scientist at Google in London, UK. He received his PhD from Cornell University and a BSc (Hons) from the Australian National University. His research interests include conversational search and recommendation, online evaluation and machine learning.



**Hamed Zamani (University of Massachusetts Amherst, USA)**

**Bio:** Hamed Zamani is an Assistant Professor in the College of Information and Computer Sciences at the University of Massachusetts Amherst (UMass), where he also serves as the Associate Director of the Center for Intelligent Information Retrieval (CIIR). His research focuses on developing and evaluating statistical and machine learning models with application to (interactive) information access systems including search engines, recommender systems, and question answering. He has been an active member of the IR community and recently served as the lead guest editor of the ACM Transactions on Information Systems (TOIS) -- Special Issue on Conversational Search and Recommendation. He also gave a keynote speech on mixed-initiative conversational search in the CONVERSE workshop at WSDM 2020. Prior to UMass, Hamed was a Researcher at Microsoft. He received his Ph.D. in 2019 under supervision of W. Bruce Croft. He obtained his M.Sc. and B.Sc. degrees from University of Tehran.

## KEYNOTE TALKS

**TITLE:** On the analysis and training of neural IR models in the context of conversational search and recommendation

**SPEAKER:** Claudia Hauff (Delft University of Technology, NL)

**ABSTRACT:** Neural technologies have had a large impact on the field of information retrieval: long-standing research problems (such as ad-hoc retrieval or passage retrieval) have seen large jumps in retrieval effectiveness and novel problems - such as conversational search - are tackled by default with neural approaches. In this talk, I will first discuss recent research directions in the conversational search realm and then highlight some of the work I have been involved in, with a focus on the training and analysis of models for conversational search and recommendation.

**TITLE:** Natural language and mixed initiative

**SPEAKER:** Filip Radlinski (Google Research, London, UK)

**ABSTRACT:** In this talk, I will consider the connection between mixed initiative and natural language in conversational systems. In particular, the talk will focus on how task-oriented systems can both understand and present information using a

natural vocabulary that reflects real preferences and the language of users in natural settings. I will describe techniques to obtain and interpret natural utterances, design interactions that invite initiative, and measure the impact of system utterances on users' perceptions about the system.

**TITLE:** Goal-oriented search for dialogue and question answering

**SPEAKER:** Jian-Yun Nie (University of Montreal, Canada)

**ABSTRACT:** Search is involved in many interactive tasks such as dialogue and question answering. In addition to relevance, the search results should also be useful for the final task. This objective is difficult to achieve with a simple search method. In this talk, we propose that search used in these tasks should be tailored to the downstream tasks so that the retrieved results more likely contain the right answer. We present two cases to illustrate it: goal-oriented dialogue and search for question answering. In both cases, search is enhanced by a tailored goal-related component.