

SCI-CHAT 2024

**SCI-CHAT - Workshop on Simulating Conversational  
Intelligence in Chat**

**Proceedings of the Workshop**

March 21, 2024

©2024 Association for Computational Linguistics

Order copies of this and other ACL proceedings from:

Association for Computational Linguistics (ACL)  
209 N. Eighth Street  
Stroudsburg, PA 18360  
USA  
Tel: +1-570-476-8006  
Fax: +1-570-476-0860  
[acl@aclweb.org](mailto:acl@aclweb.org)

ISBN 979-8-89176-082-0

## Introduction

Welcome to the Workshop on Simulating Conversational Intelligence in Chat (SCI-CHAT 2024)!

Enabling easy communication with machines via natural language is a main focus of dialogue research, including open-domain, task-oriented, knowledge-grounded and instruction-tuned models. The aim of this workshop is to bring together experts working in these speedily advancing research areas where many challenges still exist, such as learning information from conversations, applying such as a realistic and convincing simulation of human intelligence, reasoning, etc.

SCI-CHAT follows previous workshops on open domain dialogue but with a focus towards the simulation of intelligent conversation, including the ability to follow a challenging topic over a long (multi-turn) conversation, while positing, refuting and reasoning over arguments.

Our research track aims to provide a venue for reporting and discussing the latest developments in simulation of intelligent conversation, chit-chat, open-domain dialogue AI. The shared task focuses on simulating intelligent conversations; participants were asked to submit automated dialogue agents with the ability to follow a nuanced conversation topic over multiple dialogue turns, and the ability to posit, refute and reason over arguments. The participating systems were interactively evaluated with real users. All data acquired within the context of the shared task are made public, providing an important resource for improving metrics and systems in this research area.

SCI-CHAT's program consists of four accepted research track papers and two shared task system description papers. The program includes work on intelligent conversation, chit-chat, open-domain dialogue, automatic and human evaluation of open-domain dialogue, and limitations, risks and safety in open-domain dialogue. Our program also includes two invited presentations from influential researchers.

Our warmest thanks go to the program committee – for their time and effort providing valuable feedback, to all submitting authors – for their thought-provoking work, and to the invited speakers – for doing us the honor of joining our program.

Yvette Graham  
Qun Liu  
Gerasimos Lampouras  
Ignacio Iacobacci  
Sinead Madden  
Haider Khalid  
Rameez Qureshi

# Organizing Committee

## Organizers

Yvette Graham, ADAPT Centre, Trinity College Dublin

Qun Liu, Huawei Noah's Ark Lab, China

Gerasimos Lampouras, Huawei Noah's Ark Lab, UK

Ignacio Iacobacci, Huawei Noah's Ark Lab, UK

Sinead Madden, ADAPT Centre, Dublin City University

Haider Khalid, ADAPT Centre, Trinity College Dublin

Rameez Qureshi, ADAPT Centre, Trinity College Dublin

# Program Committee

## Program Committee

Andreas Vlachos, University of Cambridge, UK  
David Vandyke, Apple  
Emine Yilmaz, University College London, UK  
Hsien-chin Lin, Heinrich-Heine University, Germany  
Ivan Vulić, University of Cambridge UK  
Julius Cheng, University of Cambridge, UK  
Michael Zock, CNRS, (LIF) university of Aix-Marseille, France  
Songbo Hu, University of Cambridge, UK  
Stefan Ultes, Otto-Friedrich-University, Germany  
Valerio Basile, University of Turin, Italy

## Table of Contents

<i>Findings of the First Workshop on Simulating Conversational Intelligence in Chat</i> Yvette Graham, Mohammed Rameez Qureshi, Haider Khalid, Gerasimos Lampouras, Ignacio Iacobacci and Qun Liu .....	1
<i>Improving Dialog Safety using Socially Aware Contrastive Learning</i> Souvik Das and Rohini K. Srihari .....	4
<i>Reliable LLM-based User Simulator for Task-Oriented Dialogue Systems</i> Ivan Sekulic, Silvia Terragni, Victor Guimarães, Nghia Khau, Bruna Guedes, Modestas Filipavicius, Andre Ferreira Manso and Roland Mathis .....	19
<i>Evaluating Modular Dialogue System for Form Filling Using Large Language Models</i> Sherzod Hakimov, Yan Weiser and David Schlangen .....	36
<i>KAUCUS - Knowledgeable User Simulators for Training Large Language Models</i> Kaustubh Dhole .....	53
<i>SarcEmp - Fine-tuning DialoGPT for Sarcasm and Empathy</i> Mohammed Rizwan .....	66
<i>Emo-Gen BART - A Multitask Emotion-Informed Dialogue Generation Framework</i> Alok Debnath, Yvette Graham and Owen Conlan .....	70
<i>Advancing Open-Domain Conversational Agents - Designing an Engaging System for Natural Multi-Turn Dialogue</i> Islam A. Hassan and Yvette Graham .....	75

# Program

**Thursday, March 21, 2024**

09:15 - 09:30     *Opening Remarks*

09:30 - 10:30     *Invited Talk - Ondřej Dušek*

10:30 - 11:00     *Coffee break*

11:00 - 12:00     *Invited Talk - Dimitra Gkatzia*

12:00 - 13:30     *Lunch break*

13:30 - 14:00     *Shared Task Discussion and Findings*

14:00 - 15:15     *Contributed talks*

*Improving Dialog Safety using Socially Aware Contrastive Learning*

Souvik Das and Rohini K. Srihari

*Reliable LLM-based User Simulator for Task-Oriented Dialogue Systems*

Ivan Sekulic, Silvia Terragni, Victor Guimarães, Nghia Khau, Bruna Guedes, Modestas Filipavicius, Andre Ferreira Manso and Roland Mathis

*Evaluating Modular Dialogue System for Form Filling Using Large Language Models*

Sherzod Hakimov, Yan Weiser and David Schlangen

*KAUCUS - Knowledgeable User Simulators for Training Large Language Models*

Kaustubh Dhole

*Advancing Open-Domain Conversational Agents - Designing an Engaging System for Natural Multi-Turn Dialogue*

Islam A. Hassan and Yvette Graham

15:15 - 15:30     *Closing remarks*