

ACL 2024

**62nd Annual Meeting of the Association for Computational  
Linguistics (ACL 2024)**

**Proceedings of the Conference**

August 11-16, 2024

©2024 Association for Computational Linguistics

Order copies of this and other ACL proceedings from:

Association for Computational Linguistics (ACL)  
317 Sidney Baker St. S  
Suite 400 - 134  
Kerrville, TX 78028  
USA  
Tel: +1-855-225-1962  
[acl@aclweb.org](mailto:acl@aclweb.org)

ISBN 979-8-89176-098-1

## Introduction

Welcome to this year's ACL tutorial session, a highlight of our conference. We are thrilled to have you with us!

The ACL tutorial session aims to provide attendees with a thorough introduction to key topics in our fast-evolving research field, delivered by expert researchers. This year, as in recent years, the process of calling for, submitting, reviewing, and selecting tutorials was a collaborative effort across multiple conferences: EACL, NAACL, ACL, and EMNLP.

We assembled a review committee consisting of the tutorial chairs from EACL (Sharid Loaiciga, Mohsen Mesgar), NAACL (Rui Zhang, Nathan Schneider, Snigdha Chaturvedi), and the interim EMNLP tutorial chair (Isabelle Augenstein). Each tutorial proposal was meticulously reviewed by a panel of three reviewers, who assessed them based on criteria such as clarity, preparedness, novelty, timeliness, instructors' experience, potential audience, open access to teaching materials, and diversity (including multilingualism, gender, age, and geolocation). Out of 27 submissions, 6 were selected for presentation at ACL.

We would like to thank the tutorial authors for their commitment, dedicated collaboration and flexibility while organizing the conference. Finally, our thanks go to the conference organizers for effective collaboration, and in particular to the general chair Claire Gardent.

Enjoy the session!

Warm regards,  
ACL 2024 Tutorial Co-chairs  
Luis Chiruzzo  
Hung-yi Lee  
Leonardo F. R. Ribeiro

# Organizing Committee

## General Chair

Claire Gardent, CNRS and Université de Lorraine

## Program Chairs

Lun-Wei Ku, Academia Sinica

Andre Martins, Instituto Superior Técnico / Instituto de Telecomunicações / Unbabel

Vivek Srikumar, University of Utah

## Local Organization

Thepchai Supnithi, NECTEC and AIAT

Prachya Bookwan, NECTEC and AIAT

Thanaruk Theeramunkong, SIIT and AIAT

## Tutorial Chairs

Luis Chiruzzo, Universidad de la República

Hung-yi Lee, National Taiwan University

Leonardo Ribeiro, Amazon Alexa Seattle

# Program Committee

## Program Chairs

Lun-Wei Ku, Academia Sinica

Andre Martins, Instituto Superior Técnico / Instituto de Telecomunicações / Unbabel

Vivek Srikumar, University of Utah

## Table of Contents

<i>Computational Linguistics for Brain Encoding and Decoding: Principles, Practices and Beyond</i> Jingyuan Sun, Shaonan Wang, Zijiao Chen, Jixing Li and Marie-Francine Moens .....	1
<i>Automatic and Human-AI Interactive Text Generation (with a focus on Text Simplification and Revision)</i> Yao Dou, Philippe Laban, Claire Gardent and Wei Xu .....	3
<i>Computational Expressivity of Neural Language Models</i> Alexandra Butoi, Ryan Cotterell and Anej Svete .....	5
<i>Presentation Matters: How to Communicate Science in the NLP Venues and in the Wild?</i> Sarvnaz Karimi, Cecile Paris and Gholamreza Haffari .....	6
<i>Vulnerabilities of Large Language Models to Adversarial Attacks</i> Yu Fu, Erfan Shayegan, Md. Mamun Al Abdullah, Pedram Zaree, Nael Abu-Ghazaleh and Yue Dong .....	8
<i>Detecting Machine-Generated Text: Techniques and Challenges</i> Li Gao, Wenhan Xiong and Taewoo Kim .....	10

# Program

## Sunday, August 11, 2024

- 09:00 - 12:30     *Tutorial 1 - Computational Linguistics for Brain Encoding and Decoding: Principles, Practices and Beyond*
- 09:00 - 12:30     *Tutorial 2 - Automatic and Human-AI Interactive Text Generation (with a focus on Text Simplification and Revision)*
- 09:00 - 12:30     *Tutorial 3 - Vulnerabilities of Large Language Models to Adversarial Attacks*
- 14:00 - 17:30     *Tutorial 4 - Computational Expressivity of Neural Language Models*
- 14:00 - 17:30     *Tutorial 5 - Watermarking for Large Language Models*
- 14:00 - 17:30     *Tutorial 6 - Presentation Matters: How to Communicate Science in the NLP Venues and in the Wild?*