

IJCNLP-AAACL 2023

The Third Workshop on NLP for Medical Conversations

Proceedings of the Workshop

November 1, 2023

The IJCNLP-AACL organizers gratefully acknowledge the support from the following sponsors.

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ISBN 979-8-89176-019-6

Introduction

Welcome to the third workshop on NLP for medical conversations.

Technological advancements have been transforming healthcare rapidly in the past several years. This has been further catalyzed by the COVID-19 pandemic. Several policy changes made by the government allow added flexibility to enable remote treatment of patients. COVID-19, its symptoms, and medications are being widely discussed online. While medical discussions on public forums were prevalent earlier, their prevalence is now highlighted due to the scale of the pandemic.

To address healthcare consumers, EHR companies have been working to make health data of patients easily available to patients. More recently, technology companies are also stepping in. Smart speakers are now common in households and users interact with them about personal and public health issues. Healthcare providers are also making use of automatic speech recognition (ASR) and natural language understanding to understand doctor-patient conversations and generate medical documentation automatically. Solutions that can reliably transcribe Clinical Notes, update electronic medical/health records (EMR/EHR), and provide assistive decision support can also significantly reduce the load on physicians who need to spend nearly two hours on creating and updating documentation for every hour of direct patient care.

While applying NLP to open domain is getting increasingly popular, medical conversations present unique challenges and opportunities for impact. The speech research community also took notice and Interspeech 2022 had the first special session focused on medical conversations. After our successful events in 2020 and 2021, we are excited to continue the cross-pollination between NLP researchers and medical practitioners. The goal of this workshop is to discuss state-of-the-art approaches in conversational AI, as well as share insights and challenges when applied in healthcare. This is critical in order to bridge gaps between research and real-world product deployments, this will further shed light on future directions.

We received 8 submissions this year, and accepted 2 reviewed papers in the proceedings of the workshop. This will be a half-day workshop including keynotes and spotlight talks.

Organizing Committee

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Workshop Program

9:00–9:10 *Opening Remarks*

9:10–9:40 *Invited Talk 1*

9:40–10:00 *Clinical note section classification on doctor-patient conversations in low-resourced settings*

Zhuohao Chen, Jangwon Kim, Yang Liu and Shrikanth Narayanan

10:00–10:30 *Invited Talk 2*

10:30–11:00 *Break*

11:00–11:20 *“Dr LLM, what do I have?”: The Impact of User Beliefs and Prompt Formulation on Health Diagnoses*

Wojciech Kusa, Edoardo Mosca and Aldo Lipani

11:20–11:50 *Invited Talk 3*

11:50–12:00 *Closing Remarks*