ClimateNLP 2024

The 1st Workshop on Natural Language Processing Meets Climate Change

Proceedings of the Workshop

August 16, 2024

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317 Sidney Baker St. S
Suite 400 - 134
Kerrville, TX 78028
USA
Tel: +1-855-225-1962
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Introduction

We are excited to welcome you to ClimateNLP 2024, the first ACL workshop on Natural Language Processing Meets Climate Change. The workshop is being held on August 16th during ACL 2024, in the fascinating city of Bangkok, Thailand.

We intend to make ClimateNLP a premier publication venue for research in the intersection of Natural Language Processing (NLP) and climate change. The workshop's aim is to discuss how NLP methods can be incorporated in climate change science and climate change action. This year, the program includes three keynote talks, two oral presentation sessions, two poster sessions, two discussion sessions, and one special panel discussion session regarding the Future of ClimateNLP involving Angel Hsu, Gaku Morio, and David Thulke.

We received 36 submissions this year and recruited 41 Program Committee (PC) who are distinguished experts in the field of NLP, climate change, or both. Every submission received at least two reviews. When making our selections for the program, we carefully considered the reviews and conducted extensive debate and discussion among 11 editors. The members of the Program Committee did an excellent job in reviewing the submitted papers, and we thank them for their essential role in selecting the accepted papers and helping produce a high-quality program for the conference. In line with our purpose of discussing and learning about the intersection of NLP and Climate Change, our aim has been to create an inclusive program that accommodates as many favorably rated papers as possible. We accepted 20 papers (acceptance rate 55.6%), which cover broad topics of NLP for climate change, including perspectives from NLP researchers, climate scientists, NPOs, NGOs, policymakers, and regulators.

On the workshop day, we will have four keynote speeches from distinguished speakers Angel Hsu (Professor at the University of North Caroline, Chapel Hill), Gaku Morio (Researcher at Stanford University and Hitachi America), David Thulke (Researcher at RWTH Aachen) and Markus Leippold (Professor at the University of Zurich and Researcher at Google Deepmind). Furthermore, we complement these inputs by presentations of the accepted papers in oral and poster form. These presentations will feature speakers from all over the world, ensuring a diverse set of speakers and topics. Additionally, our keynote speaker will be involved in a panel session discussing future directions and insights into the current state of ClimateNLP. We round up the program with a moderated discussion about potentials, collaboration opportunities, and open questions in the ClimateNLP domain. Thus, the program includes both informative as well as interactive elements.

We thank our program committee members for committing their time to help us select an excellent technical program.

We thank all the authors who submitted to the workshop and all workshop participants for making ClimateNLP 2024 a success and for growing the research areas of NLP for climate change with their fine work.

Jingwei Ni and Tobias Schimanski, Organizing Committees

Organizing Committee

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Friday, August 16, 2024

09:00 - 09:05 *Opening Remarks*

09:05 - 09:30 *Keynote Speech by Angel Hsu*

09:30 - 09:30 *Oral Presentation 1*

Generative Debunking of Climate Misinformation
Francisco Zanartu, Yulia Otmakhova, John Cook and Lea Frermann

Statements: Universal Information Extraction from Tables with Large Language Models for ESG KPIs
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Envisioning NLP for intercultural climate communication
Steven Bird, Angelina Aquino and Ian Mongunu Gumbula

10:00 - 10:45 *Poster Session 1*

10:45 - 11:00 *Coffee Break*

11:00 - 11:05 *Session 2 Introduction*

11:05 - 11:30 *Keynote Speech by Gaku Morio*

11:30 - 12:00 *Panel Discussion - Future of ClimateNLP*

12:00 - 13:30 *Lunch Break*

13:30 - 13:35 *Session 3 Introduction*

13:35 - 14:00 *Keynote Speech by David Thulke*

14:00 - 14:30 *Oral Presentation 2*

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LEAF: Predicting the Environmental Impact of Food Products based on their Name
Bas Krahmer

Using LLMs to Build a Database of Climate Extreme Impacts
Ni Li, Shorouq Zahra, Mariana Madruga De Brito, Clare Marie Flynn, Olof Görnerup, Koffi Worou, Murathan Kurfali, Chanjuan Meng, Wim Thiery, Jakob Zscheischler, Gabriele Messori and Joakim Nivre

My Climate Advisor: An Application of NLP in Climate Adaptation for Agriculture
Vincent Nguyen, Sarvnaz Karimi, Willow Hallgren, Ashley Harkin and Mahesh Prakash

14:30 - 15:00 *Question-Guided Open Discussion*

15:00 - 15:45 *Poster Session 2*

15:45 - 16:00 *Coffee Break*

16:00 - 16:05 *Session 4 Introduction*

16:05 - 16:30 *Keynote Speech by Markus Leippold*

16:30 - 17:00 *Open Discussion & Closing Remarks*