AAAI 2023 Fall Symposium Series

AI and Climate: The Role of AI in a Climate-Smart Sustainable Future

Timetable and Logistics – V 1.1

Wednesday, Oct 25, 2023

TIME	TOPIC	SPEAKER & Paper Title	Prog. Committee
9:00 am – 9:10 am	Welcome		Frank Stein
9:10 am – 9:20 am	Introduction	Themes of the Conference, welcome keynote speaker	Melissa?
9:20 am – 10:05 am	Keynote	To Be Announced	
10:05 am – 10:30 am	Paper 1	#7374 Thomas Brunschwiler, IBM (local) Sustainable Inference of Remote Sensing Data by Recursive Semantic Segmentation - A Flood Extent Mapping Study	
10:30 am – 11:00 am	Coffee Break		
11:00 am – 11:25 pm	Paper 2	#2163 Usman Nazir, Lahore University of Management Sciences (remote) Spatio-Temporal driven Attention Graph Neural Network with Block Adjacency matrix (STAG-NN-BA) for Remote Land-use Change Detection	
11:25 am – 11:45 pm	Paper 3	#2157 Sarthak Chaturvedi, Georgia Tech (local) A Generative AI Approach to Pricing Mechanisms and Consumer Behavior in the Electric Vehicle Charging Market	
11:45 am – 12:05 pm	Paper 4	#6071 Jennifer Sleeman, JHU/APL (local) Deep Learning Ensembles for Improved Atmospheric Composition Modeling	
12:05 pm – 12:25 pm	Paper 5	#2283 Alex Stevenson, NREL (remote) Efficient Reinforcement Learning for Real Time Hardware-based Energy System Experiments	
12:30 pm – 2:00 pm	Lunch	Reservation at PF Chang – right across the driveway under Frank's name. Join us if you would like – each person	

		orders/pays separately.	
2:00 pm – 2:25 pm	Paper 6	#9511 Geoffrey Guest, Amazon (local) Scaling Carbon Footprinting: Challenges and Opportunities	
2:25 pm – 2:45 pm	Paper 7	#6925 Ryo Koblitz, Nokia Bell Labs (local) Reducing the Environmental Impact of Wireless Communication via Probabilistic Machine Learning	
2:45 pm – 3:10 pm	Paper 8	#3775 Maximillan Nitsche, IBM Consulting, KIT (local) AB2CD: AI for Building Climate Damage Classification and Detection	
3:10 pm- 3:30 pm	Paper 9	#6488 Bayu Adhi Tama, UMBC (local) Tracing Englacial Layers in Radargram via Semi-supervised Method: A Preliminary Result	
3:30 – 4:00 pm	Break		
4:00 pm – 4:25 pm	*Paper 10*	#6355 Feras Batarseh, Virginia Tech (local) NeuralFlood: An AI-Driven Flood Susceptibility Index	
4:25 pm – 4:45 pm	Paper 11	#8055 Catharina Hollauer , Georgia Tech (local) Generative AI and Discovery of Preferences for Single-Use Plastics Regulations	
4:45 pm – 5:05 pm	Paper 12	#1029 Jose González-Abad, Instituto de Física de Cantabria (IFCA), CSIC-UC (local) Multi-variable Hard Physical Constraints for Climate Model Downscaling	
5:10 pm – 6:00 pm	Panel #1 Discussion	AI, Climate & Policy Panel Invited: -Stefanie Falconi, USAID - Jennifer Sklarew, GMU - Dann Sklarew, GMU	Moderator:
6:00 pm – 7:00 pm	Reception		

Thursday, Oct 26, 2023

TIME	TOPIC	SPEAKER	Prog. Committee
9:00 am – 9:10	Welcome Back		
9:10 am – 9:35 am	Paper 13	#513 Deepank Singh, University of Houston (remote) Climate Resilience through AI-driven Hurricane Damage Assessments	
9:35 am – 9:55am	Paper 14	#7314 Biao Luo, Alibaba Cloud, Hangzhou, Zhejiang, China (remote) AutoPCF: A Novel Automatic Product Carbon Footprint Estimation Framework Based on Large Language Models	
9:55 am – 10:20 am	Paper 15	#4806 Amal Nammouchi, Karlstad University (Remote)) Quantum Machine Learning in Climate Change and Sustainability: A Short Review	
Buffer		Due to remote presentations	
10:30 am – 11: 00 am	Break		
11:00 am – 11:25 am	Paper 16	#1010 Lekha Patel, Sandia National Labs (local) Deep learning aerosol-cloud interactions from satellite imagery	
11:25 am – 11:50 pm	Paper 17	#2085 Seyed Mousavi, Stanford University (local) AI-driven E-Liability Knowledge Graphs: A Comprehensive Framework for Supply Chain Carbon Accounting and Emissions Liability Management	
11:50 pm – 12:05 pm	Paper 18	#6408 Seyed Mousavi (local), Stanford University (local) Leveraging AI-derived Data for Carbon Accounting: Information Extraction from Alternative Sources	
12:05 pm – 12:30 pm	Paper 19	#735 Joshua Steine, Rand Corporatin (local) Adversarial Threats in Climate AI: Navigating Challenges and Crafting Resilience	
12:30 pm – 2:00 pm	Lunch		
2:00 pm – 2:45 pm	Panel #2	Panel on Foundational Models Invited: - Bianca Zadrozny (Geo-Foundations)	Thomas Brunschwiler, Moderator?

		- Rahul Ramachandran - Anima Anandkumar - Aditya Grover - Markus Leippold Sasha Luccioni	
2:45 pm – 3:30 pm	Keynote	Vipin Kumar, AAAI Fellow and Regents Professor and William Norris Chair in Large Scale Computing Department of Computer Science and Engineering Director, CSE Data Science Initiative University of Minnesota	Frank Stein, Introduction
3:30 pm – 4:00 pm	Break		
4:00 pm – 4;25 pm	Paper 20	#6709 Maximillan Touzel, Université de Montreal (local) Ideology as topic correlation structure: Inference method and example application to carbon tax public opinion	
4:25 pm – 4:45 pm	Paper 21	#2802 Benjamin Huynh, Johns Hopkins University (local) AI for Anticipatory Action: Moving Beyond Climate Forecasting	
4:45 pm – 5:30 pm	Panel #3 Discussion	Panel on Financing AI for Climate Invited: - James Mister - Joshua Elliott - Sophie Purdom	Jim Spohrer - Moderator
5:30 pm – 6:00 pm	Workshop Discussion & Readout Prep	ALL – Create several slides summarizing our symposium	Presenter?
6:00 pm – 7:30 pm	Plenary Session (with our Readout)		

Friday, October 27, 2023

TIME	TOPIC	Facilitator
9:00 am – 10:30 am	Group Workshop: Identifying Critical Data Gaps for AI & Climate (all symposium members encouraged to participate)	Xiaojuan Liu, CCAI Researcher Eric Scheier, CCAI Researcher
10:30 am – 11:00 am	Break	
11:00 am – 12:30 pm	Group Workshop (Continued) Symposium Feedback Discussion All symposium members encouraged to participate.	