

Foreword

Welcome to the 2023 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC). We proudly continue VL/HCC's tradition as the premier international forum for research on how people learn, express, and understand computational ideas and on the languages, tools, and interventions that can aid people in doing so. Our program this year was diverse as usual, and we also encouraged submissions and keynote talks around low-code / no-code programming systems, especially given the recent popularity of AI coding assistance tools based on large language models (LLMs) such as GitHub Copilot, ChatGPT, and others. With these new technologies developing at such a rapid pace, it is an exciting time to be learning and doing programming.

Turning to the technical program, we received a total of 58 submissions, including 51 submitted as full papers and 7 as short papers. All papers were assigned for independent review to at least three members of the Program Committee. Once the initial reviews were in, the authors had the opportunity to read and respond to reviews, and the committee discussed and revised their reviews based on these responses. At the conclusion of the peer review process, we accepted 16 full papers, an additional 9 full submissions as short papers, and 1 short paper submission. Our overall paper acceptance rate was 30%, which is similar to recent years' VL/HCC conferences. We have several very interesting papers in VL/HCC's "traditional core" focus areas, including visual program representations and techniques for giving programmers better feedback. We also have papers in other areas that are familiar to VL/HCC attendees, including programming education, code comprehension, help seeking, and data science.

VL/HCC 2023 will also feature three exciting keynote talks from four researchers working in diverse areas across both academia and industry:

1) Margaret Burnett's research runs the gamut of human-centric aspects of developing software better. Together with her students and collaborators, she co-founded the area of end-user software engineering for both traditional software and for AI; brought information foraging theory to software tools that support today's developers; and debunked the belief that software is gender-neutral and invented methods to eradicate software's gender-inclusivity "bugs". Her work has impacted commercial software used by millions of people. Burnett is a University Distinguished Professor in the School of Electrical Engineering and Computer Science at Oregon State University. She holds 4 patents; has received 10 best paper awards/honorable mentions and 5 Long-Term Impact awards; and has received multiple mentoring, service, and research awards. In 2022, she received IEEE's TCSE Distinguished Women in Science and Engineering Award, for outstanding and sustained contributions to the software engineering community. She is an ACM Fellow, and was elected to ACM's CHI Academy in 2016 as one of the "principal leaders of the field" of HCI. Burnett believes she has attended more VL/HCC conferences than anyone else in the history of the conference. VL/HCC'23 will be the 34th VL/HCC (in a row) that she has attended.

2) Professor Elena Glassman's academic biography: I design, build and evaluate systems for comprehending and interacting with population-level structure and trends in large code and data corpora. I am currently an Assistant Professor of Computer Science at the Harvard Paulson School of Engineering & Applied Sciences, specializing in Human-Computer Interaction. From 2018-22, I was the Stanley A. Marks & William H. Marks Professor at the Radcliffe Institute for Advanced Study, and more recently I was named as a 2023 Sloan Research Fellow. At MIT, I earned a PhD and MEng in Electrical Engineering and Computer Science and a BS in Electrical Science and Engineering. Before joining Harvard, I was a postdoctoral scholar in Electrical Engineering and Computer Science at the University of California, Berkeley, where I received the Berkeley Institute for Data Science Moore/Sloan Data Science Fellowship.

3) Dr. Carrie Cai and Dr. Michael Terry are research scientists at Google who co-lead Human-AI Interaction in Google's People+AI Research group (PAIR). Carrie Cai's biography: I am a Research Scientist in Google's Responsible AI division and Manager / Area Lead of Human-AI Interaction in Google's People+AI Research group (PAIR). My research aims to improve human+AI outcomes, with a particular focus on human interaction with Large Language Models and Controllable AI. Previously, I earned a PhD in Computer Science at MIT CSAIL's User Interface Design group, where I created interactive systems for wait-learning to help people practice desired skills (e.g. vocabulary learning) while waiting. Michael Terry's biography: I create new interactive systems, tools, and experiences by mixing human-computer interaction (HCI), design, and elements of machine learning (ML), information retrieval (IR), and crowdsourcing. Prior to joining Google, I was an Associate Professor in the Cheriton School of Computer Science at the University of Waterloo, and the co-director of the CS HCI Lab and Waterloo HCI.

Rounding out the VL/HCC program, we have 26 posters and showpieces which highlight the newest research within our community. And we will once again host a Graduate Consortium that provides graduate students working in VL/HCC research areas with opportunities to exchange feedback on their research with both peers and established researchers in the field.

VL/HCC owes a debt of gratitude to many. The IEEE Computer Society was instrumental in helping with the behind the scenes details of hosting a conference. VL/HCC 2023 is 100% Sponsored by IEEE Computer Society Technical Committee on Multimedia Computing (TCMC). But at the end of the day, we would not have a conference without the many contributions from authors, reviewers, and the organizing committee. Thanks to everyone for your efforts, volunteer time, and graciousness!

This year's conference will be hosted in-person in Washington DC, the capital of the United States, from October 3-6, 2023. It will be held in the 5th floor events center at the Martin Luther King Jr. Memorial Library in downtown Washington, DC. This venue features a state of the art auditorium as well as a rooftop terrace with views of DC. We also hope that participants will be able to appreciate the city and what it has to offer beyond the conference itself.

We look forward to four days of research papers, posters, and showpieces, along with valuable unstructured time to interact with colleagues. We hope that you will find value in this year's

conference program and that you will be able to renew old connections and forge new ones. Welcome to all!

General Chair:

Thomas LaToza, *George Mason University, United States*

Program Chairs:

Esther Guerra, *Universidad Autónoma de Madrid, Spain*

Philip Guo, *University of California at San Diego, United States*