Preface

Message from the Program Chairs

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Welcome to the twelfth Symposium on Large-Scale Data Analysis and Visualization, held this year in Oklahoma City, Oklahoma, USA. In many areas of science, simulations and experiments are beginning to generate many petabytes of data, with some sciences facing exabytes of data in the near term. A similar data deluge presents itself in industry, with businesses and internet applications generating massive amounts of data. Our ability to manage, mine, analyze, and visualize this data is fundamental to the knowledge discovery process. That is, the value of data at extreme-scale can be fully realized only if we have end-to-end solutions, which demand a collective, interdisciplinary effort to develop.

The Large-Scale Data Analysis and Visualization (LDAV) symposium will be held in conjunction with IEEE VIS 2022, bringing together domain scientists, data analytics and visualization researchers, and users of these massive data systems. A primary aim for this symposium is to facilitate interactions between these diverse groups and provide a forum for exchanging ideas required to develop next-generation data-intensive analysis and visualization technologies. LDAV attendees are introduced to the latest and greatest research innovations in large data management, analysis, and visualization. Furthermore, they learn how recent innovations impact data-intensive computing and knowledge discovery and discuss the critical issues in creating complete end-to-end solutions. We hope this event will continue to foster a community of research, innovation, and solutions specifically targeting the problems of large-scale data.

After the submission deadline in mid-June 2022, we received 14 final manuscripts that were reviewed and resulted in 6 accepted papers (43%). Three members of the International Program Committee (IPC) reviewed each paper. The review process was single-blind: the IPC members and the chairs knew the authors' identity, but not the other way around. A great effort was made to identify and prevent conflicts of interest at all levels. All reviewers were asked to read and agree to the IEEE Visualization and Graphics Technical Committee (VGTC) ethics guidelines. After all the reviews were completed, the primary reviewer led an online discussion among all reviewers and was responsible for writing a summary review and recommendation. Based on the reviewer's recommendations, the individual reviews, and the online discussions, we made final acceptance decisions after thorough deliberation by the Program Chairs. Further, to highlight ongoing work

and late-breaking topics, the Poster Chairs selected posters and included their abstracts in the proceedings.

The best paper committee was comprised of three IPC members who each evaluated the top-scoring papers from initial review. The best paper for LDAV 2022 is "Distributed Hierarchical Contour Trees" by Hamish Carr, Oliver Rübel and Gunther Weber. This paper is published directly to IEEE Transactions on Visualization and Computer Graphics (TVCG).

We are thrilled to have our plenary speaker this year: Han-Wei Shen, Professor of Computer Science and Engineering at The Ohio State University, presenting "Machine Learning for Large Scale Scientific Data Analysis and Visualization".

Putting LDAV together was a huge team effort, and we would like to thank the LDAV Steering Committee: Janine Bennett, Hank Childs, Christoph Garth, Kenneth Moreland, Julien Tierny, and Hongfeng Yu; the Symposium Chairs: Peer-Timo Bremer, Kristi Potter, and Chaoli Wang; the Posters Chairs: Jonas Lukasczyk, Silvio Rizzi, and Stefan Zellmann; and all IPC members. Finally, we would like to thank the authors of the submitted papers and posters. Without their innovative, exciting work, there would be no LDAV.