HCIS: Call for Papers Special Issue
"Robust Visual Analytics and Its Applications"

ATLANTIS PRESS

Guest Editor(s)

Imran Razzak
Deakin University, Australia
E-mail: imran.razzak@deakin.edu.au

Ibrahim A. Hameed
Norwegian University of Science and Technology (NTNU), Norway
E-mail: Ibib@ntnu.no

Jianlong Zhou
University of Technology Sydney, Australia
E-mail: Jianlong.Zhou@uts.edu.au

Md Rafiqul Islam
University of Technology Sydney, Australia
E-mail: MdRafiqul.Islam@uts.edu.au

Aims and Scope

We are living in the age of Data Science (DS), whereas the uses of massive amounts of data are rapidly increasing in many applications ranging from governmental management, infrastructure maintenance, insurance decisions, to personalized learning and other domains. The analyses of these data are grim, irreconcilable and complex. To address these data issues, new advancements such as Visual Analytics (VA) have proven increasingly efficient and effective to visualize potential insights in many applications.

Robust visual analytics is the science of analytical reasoning supported by interactive visual interfaces, which is more than only visualization. It can be seen as an integral approach combining visualization, human factors (e.g. interaction, cognition, perception, collaboration, presentation, and dissemination), and data analysis. It also integrates methodology from information analytics, geospatial analytics, statistical analysis, and scientific analytics. In order to strengthen scientific contributions for data visualization, this special issue intends to bring together researchers and developers from academic as well as practical fields and industries worldwide working on the development of robust visual analytics.

Main Topics and Quality Control

The special issue aims to publish recent works in the fields of **robust data analysis and its applications**. The topics of the special issue include, but are not limited to, those addressing the following topics.

- Robust visual encoding methods
- Robust tools for visualization
- Deep learning for visualization
- Pattern mining for visualization
- Novel use of visualization in solving diverse problems
- Robust interaction techniques for big data visualization
- Robust methods for behaviour analysis
- Robust methods for visualization recommendations
- Robust intelligent systems
- Cognitive and perception science
- Comparative evaluation of competing visualization approaches

Important Dates

Submission deadline of papers:	**February 28, 2022**
Notification of review results:	April 30, 2022
Submission of revised papers:	May 30, 2022
Notification of final review results:	June 30, 2022

Note: This special issue will build gradually, with articles being added to the contents list online as soon as they are ready.

Submit your Paper

All papers have to be submitted via the Editorial Manager online submission and peer review system. Instructions will be provided on screen and you will be stepwise guided through the process of uploading all the relevant article details and files associated with your submission. All manuscripts must be in the English language.

To access the online submission site for the journal, please visit https://www.editorialmanager.com/h-cis/default.aspx. Note that if this is the first time that you submit to Human-Centric Intelligent Systems, you need to register as a user of the system first.

Note: Before submitting your paper, please make sure to review the journal's Author Guidelines first.

Introduction of the Guest Editor(s)

Imran Razzak, https://www.deakin.edu.au/about-deakin/people/imran-razzak

Imran Razzak is currently Sr. Lecturer at the School of Information Technology at Deakin University, Australia. Imran's research interest is machine learning and data analytics in general, particularly in healthcare industry. He is a passionate health informatician who wants to make the healthcare industry a better place through informatics. He has published more than 70 refereed research publications in international journals and conferences. He is an editorial board member of many reputable international journals as well as session co-chair, session chair and TPC member of dozens of conferences. He is also working as a consultant in various projects involving deep learning models in Big Data, IoT, medical Imaging and BCI applications.

Ibrahim A. Hameed, https://www.ntnu.edu/employees/ibib

Ibrahim A. Hameed (Senior Member, IEEE) received Ph.D. degree in industrial systems and information engineering from Korea University, South Korea, and the PhD degree and in mechanical engineering from Aarhus University, Denmark, in 2010 and 2012, respectively. He is currently a professor in AI & Machine Learning with the Department of ICT and Natural Sciences,

Faculty of Information Technology and Electrical Engineering, Norwegian University of Science and Technology (NTNU), Norway. He is also the Deputy Head of Research and Innovation with the Department of ICT and Natural Sciences, NTNU. Hameed is teaching courses at undergraduate & postgraduate levels. He is the Elected Chair of the IEEE Computational 732 Intelligence Society (CIS) Norway Section. He is the founder and chair of the AI and Robotics interest group within the Norwegian Computer Association (Den Norske Dataforening DnD). He is the founder and CEO of Deep Tech AS.

Jianlong Zhou, https://profiles.uts.edu.au/jianlong.zhou

Dr. Jianlong Zhou is currently a Senior Lecturer in the School of Computer Science, Faculty of Engineering and IT, University of Technology Sydney, leading the UTS [Human-Centred AI] (http://www.hcai-lab.org) research lab. His current work focuses on ethics of AI, AI fairness, AI explainability, data analytics, visual analytics, behaviour analytics, human-computer interaction, and related applications. Before joining UTS, Dr. Zhou was a senior research scientist in Data61, CSIRO and NICTA, Australia. He has extensive research experiences on various fields ranging from AI, visual analytics, VR/AR, to human-computer interaction in different universities and research institutes in the USA, Germany and Australia. Dr. Zhou is a leading senior researcher in trustworthy and transparent machine learning, and has done pioneering research in the area of linking human and machine learning. He also works with industries in advanced data analytics for transforming data into actionable operations particularly by incorporating human user aspects into machine learning and translate machine learning into impacts in real-world applications.

Md Rafiqul Islam, https://rafiqulislamcse24.wixsite.com/rafiqulcse

Md Rafiqul Islam has been working in the field of data science under the supervision of Professor Guandong Xu at the Data Science and Machine Learning (DSMI) Lab, University of Technology Sydney (UTS), Australia. He has 7+ years of research and teaching experiences in computer science. His research interests include data analytics, behavior analysis, data visualization, big data, healthcare, and information retrieval. He has published over 19 research papers in highly recognized journals and conference proceedings. He is working on several projects, such as visual analytics for healthcare, adverse behavior analysis, text processing using deep learning, and anomaly detection from social network data.