2014 International Conference on Data Science and Advanced Analytics

DSAA2014

30 October - 1 November, 2014, Shanghai, China

http://datamining.it.uts.edu.au/conferences/dsaa14/

[Paper Submission deadline: 5 July, 2014] [Notification of acceptance: 10 August, 2014] [Final Camera-ready papers due: 30 August, 2014]

Data driven scientific discovery approach has already been agreed to be an important emerging paradigm for computing in areas including social, service, Internet of Things (or sensor networks), and cloud. Under this paradigm, Big Data is the core that drives new researches in many areas, from environmental to social. There are many new scientific challenges when facing this big data phenomenon, ranging from capture, creation, storage, search, sharing, analysis, and visualization. The complication here is not just the storage, I/O, query, and performance, but also the integration across heterogeneous, interdependent complex data resources for real-time decision-making, collaboration, and ultimately value co-creation. Data sciences encompass the larger areas of data analytics, machine learning and managing big data. Data analytics has become essential to glean some understanding from large data sets and convert data into actionable intelligence. With the rapid growth in the volumes of data available to enterprises, Government and on the web, automated techniques for analyzing the data have become essential.

The 2014 International Conference on Data Science and Advanced Analytics (DSAA'2014) aims to provide a timely forum that brings together researchers, industry practitioners, as well as potential users of Big Data, to promote collaborations and exchange of ideas and practices, discuss new opportunities, and investigate the best actionable analytics framework for wide range of applications. The conference solicits experimental and theoretical works on data science and advanced analytics along with their application to real life situations.

Topics of Interest

Foundations
- New mathematical, probabilistic and statistical models and
- theories
- New learning theories, models and systems
- Deep analytics and learning
- Distributed and parallel computing (cloud, map-reduce, etc.)
- Non-iidness (heterogeneity & coupling) learning
- Invisible structure, relation and distribution learning
- Intent and insight learning
- Scalable analysis and learning
- Mining multi-source and mixed-source information
- Architecture, management and process
- Data pre-processing, sampling and reduction
- Feature selection and feature transformation
- High performance/parallel/distributed computing
- Analytics architectures and infrastructure
- Heterogeneous data/information integration
- Crowdsourcing
- Human-machine interaction and interfaces

Retrieval, query and search
- Web/social web/distributed search
- Indexing and query processing
- Information and knowledge retrieval
- Personalized search and recommendation
- Query languages and user interfaces

Analytics, discovery and learning
- Mixed-type data
- Mixed-structure data
- Big data modeling and analytics
- Multimedia/stream/text/visual analytics
- Coupling, link and graph mining
- Personalization analytics and learning
- Web/online/network mining and learning
- Structure/group/community/network mining
- Big data visualization analytics
- Large scale optimization

Privacy and security
- Security, trust and risk in big data
- Data integrity, matching and sharing
- Privacy and protection standards and policies
- Privacy preserving big data access/analytics
- Social impact

Evaluation, applications and tools
- Data economy
- Domain-specific applications
- Quality assessment and interestingness metrics
- Complexity, efficiency and scalability
- Anomaly/fraud/exception/change/event/crisis analysis
- Large-scale recommender and search systems
- Big data representation and visualization
- Post-processing and post-mining
- Large Scale Application Case Studies
- Online/business/government data analysis
- Mobile analytics for handheld devices
- Living analytics

Publications

All accepted papers will be published by IEEE and IEEE Xplore. The conferenceproceedings will be submitted for EI indexing through INSPEC by IEEE. Selected top quality papers accepted and presentedin the conference for extension and publication in the special issue of some international journals, including IEEE Intelligent Systems, WWWJ, and Neurocomputing.The accepted workshop papers will be published through Springer CCIS series.

Advisory Committee
- Usama Fayyad, Barclays Bank, UK
- Masaru Kitsuregawa, University of Tokyo, Japan
- Rao Kotagiri, University of Melbourne, Australia
- Vipin Kumar, University of Minnesota, USA
- Bengchin Ooi, National University of Singapore
- Xin Yao, University of Birmingham, UK
- Philip S Yu, University of Illinois at Chicago, USA

Steering Committee
- Longbing Cao, University of Technology, Sydney, Australia
- Ming-Syan Chen, Academia Sinica, Taiwan
- Diane J. Cook, Washington State University
- Bart Goethals, University of Antwerp, Belgium
- Herve Martin, Laboratoire d'Informatique de Grenoble, France
- Hiroshi Motoda, Osaka University and AFOSR/AOARD, Japan
- Jian Pei, Simon Fraser University, Canada
- Vincent Tseng, National Cheng kung University, Taiwan
- Geoff Webb, Monash University, Australia
- Limsoon Wong, National University of Singapore
- Osmar Zaiane, University of Alberta, Canada

General Chairs
- Philip S Yu, University of Illinois at Chicago, USA
- Masaru Kitsuregawa, University of Tokyo, Japan

Conference Chairs
- Hiroshi Motoda, Osaka University and AFOSR/AOARD, Japan
- Bart Goethals, University o f Antwerp, Belgium
- Minyi Guo, Shanghai Jiaotong University, China

Program Committee Chairs
- Longbing Cao, University of Technology, Sydney, Australia
- George Karypis, University of Minnesota, USA
- Irwin King, Chinese University of Hong Kong, China
- Wei Wang, Fudan University, China

Local Arrangement Chairs
- Hongming Cai, Shanghai Jiaotong Universyity, China
- Wei Liu, University of Technoloyg , Sydney, Australia

Workshop Chairs
- Gang Li, Deakin University , Australia
- Eric Gaussier, University Joseph Fourier, France

Tutorial Chairs
- Junbin Gao, Charles Stuart University , Australia
- Sourav S Bhowmick, Nanyan g Technological Universyit , Singapore

Panel Chairs
- Gabriella Pasi, University di Milano Bicocca, Italy
- Em-Ping Lim, Singapore Management University, Singapore

Sponsorship Chairs
- Guangtao Xue, Shanghai Jiaotong University, China

Publicity Chairs
- Xiaohui Tao, University of Southern Queensland, Australia
- Xin Wang, University of Calgary, Canada
- Xiaodong Yue, Shanghai University

Registration/Finance Chair
- Qi Gu, Shanghai Jiaotong University, China

Publication Chair
- Frank Jiang, University of Technoloyg, Sydney, Australia

Technical Sponsors

KDD | IEEE Computational Intelligence Society | IEEE Task Force on Data Sciences and Advanced Analytics | IEEE IEEE NSW Section (Region 10) | acm SIGKDD Australia and New Zealand Chapter

Conference organizers

UTS University of Technology, Sydney | sdgc STANFORD