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F. Buccafurri, A. Holzinger, P. Kieseberg, A.M. Tjoa, E. Weippl (Eds.)

Availability, Reliability, and Security in Information Systems

IFIP WG 8.4, 8.9, TC 5 International Cross-Domain Conference, CD-ARES 2016, and Workshop on Privacy Aware Machine Learning for Health Data Science, PAML 2016, Salzburg, Austria, August 31 - September 2, 2016, Proceedings

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This volume constitutes the refereed proceedings of the IFIP WG 8.4, 8.9, TC 5 International Cross-Domain Conference on Availability, Reliability and Security in Information Systems, CD-ARES 2016, and the Workshop on Privacy Aware Machine Learning for Health Data Science, PAML 2016, co-located with the International Conference on Availability, Reliability and Security, ARES 2016, held in Salzburg, Austria, in September 2016. The 13 revised full papers and 4 short papers presented were carefully reviewed and selected from 23 submissions. They are organized in the following topical sections: Web and semantics; diagnosis, prediction and machine learning; security and privacy; visualization and risk management; and privacy aware machine learning for health data science.



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Preface

The Cross-Domain Conference and Workshop CD-ARES is focused on the holistic and scientific view of applications in the domain of information systems.

The idea of organizing cross-domain scientific events originated from a concept presented by IFIP president Leon Strous at the IFIP 2010 World Computer Congress in Brisbane, which was seconded by many IFIP delegates in further discussions. Therefore CD-ARES concentrates on the multitudinous aspects of information systems, in bridging the gap between the research results in computer science and the many application fields.

This effort leads us to the consideration of the various important issues of massive information sharing and data integration, which will (in our opinion) dominate scientific work and discussions in the area of information systems in the second decade of this century.

The organizers of this event, who are engaged within IFIP in the area of Enterprise Information Systems (WG 8.9), Business Information Systems (WG 8.4), and Information Technology Applications (TC 5), very much welcome the typical cross-domain aspect of this event.

To guarantee a high-quality event, we assembled a program for CD-ARES 2016 consisting of 12 selected papers. CD-ARES 2016 provided a good mix of topics ranging from knowledge management and software security to mobile and social computing.

Machine learning is the fastest growing field in computer science, and health informatics is among the greatest challenges, where privacy, data protection, safety, information security, and fair use of data is of utmost importance. Experts of work area 1 (data science), 2 (machine learning), and 7 (privacy) of the international expert network HCI-KDD carefully selected five papers for the PAML (Privacy Aware Machine Learning) session.

The papers presented at this conference were selected after extensive reviews by the Program Committee with the essential help of associated reviewers.

We would like to thank all PC members and the reviewers who made great efforts contributing their time, knowledge, expertise and foremost the authors for their contributions.

August 2016

Francesco Buccafurri
Andreas Holzinger
Peter Kieseberg
A Min Tjoa
Edgar Weippl

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