Advances in Intelligent Systems and Computing

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Jemal Abawajy · Zheng Xu ·
Mohammed Atiquzzaman ·
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Editors

2021 International Conference on Applications and Techniques in Cyber Intelligence

Applications and Techniques in Cyber Intelligence (ATCI 2021) Volume 1

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Foreword

The 2021 International Conference on Applications and Techniques in Cyber Intelligence (ATCI 2021), building on the previous successes in Fuyang, China (2020), Huainan, China (2019), Shanghai, China (2018), Ningbo, China (2017), Guangzhou, China (2016), Dallas, USA (2015), Beijing, China (2014), and Sydney, Australia (2013), is proud to be in the eighth consecutive conference year. ATCI 2021 has moved online due to COVID-19.

The purpose of ATCI 2021 is to provide a forum for presentation and discussion of innovative theory, methodology and applied ideas, cutting-edge research results, and novel techniques, methods, and applications on all aspects of cyber and electronics security and intelligence. This conference establishes an international forum and aims to bring recent advances in the ever-expanding cybersecurity area including its fundamentals, algorithmic developments, and applications.

Each paper was reviewed by at least two independent experts. This conference would not have been a reality without the contributions of the authors. We sincerely thank all the authors for their valuable contributions. We would like to express our appreciation to all members of the Program Committee for their valuable efforts in the review process that helped us to guarantee the highest quality of the selected papers for the conference.

We would like to express our thanks to the strong support of the General Chairs, Publication Chairs, Organizing Chairs, Program Committee Members, and all volunteers.

Our special thanks are due also to the editors of Springer book series "Advances in Intelligent Systems and Computing", Thomas Ditzinger, Holger Schaepe, Beate Siek, and Gowrishankar Ayyasamy, for their assistance throughout the publication process.

Jemal Abawajy
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Welcome Message

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Conference Program at a Glance

Saturday, June 19, 2021, Tencent Meeting Online Link		
9:00–9:30	Opening ceremony by conference PC Chair	Tencent Meeting
9:30–10:10	Keynote 1: Vijayan Sugumaran	Tencent Meeting
10:10–10:50	Keynote 2: Jemal Abawajy	Tencent Meeting
Saturday, June 19, 2021, Tencent Meeting Online Link		
13:00–18:00	Session 1	Tencent Meeting
	Session 2	Tencent Meeting
	Session 3	Tencent Meeting
	Session 4	Tencent Meeting
	Session 5	Tencent Meeting
	Session 6	Tencent Meeting
	Session 7	Tencent Meeting

ATCI 2021 Keynotes

Vijayan Sugumaran

Vijayan Sugumaran is Professor of Management Information Systems and Chair of the Department of Decision and Information Sciences at Oakland University, Rochester, Michigan, USA. He is also Co-Director of the Center for Data Science and Big Data Analytics at Oakland University. He received his Ph.D. in Information Technology from George Mason University, Fairfax, Virginia, USA. His research interests are in the areas of big data management and analytics, ontologies and semantic web, intelligent agent and multi-agent systems. He has published over 200 peer-reviewed articles in journals, conferences, and books. He has edited 12 books and serves on the Editorial Board of eight journals. He has published in top-tier journals such as Information Systems Research, ACM Transactions on Database Systems, Communications of the ACM, IEEE Transactions on Big Data, IEEE Transactions on Engineering Management, IEEE Transactions on Education, and IEEE Software. Dr. Sugumaran is Editor-in-Chief of the International Journal of Intelligent Information Technologies. He is Chair of the Intelligent Agent and Multi-Agent Systems mini-track for Americas Conference on Information Systems (AMCIS 1999–2019). Dr. Sugumaran has served as Program Chair for the 14th Workshop on E-Business (WeB2015), the International Conference on Applications of Natural Language to Information Systems (NLDB 2008, NLDB 2013, NLDB 2016, and NLDB 2019), the 29th

Australasian Conference on Information Systems (ACIS 2018), the 14th Annual Conference of Midwest Association for Information Systems, 2019, and the 5th IEEE International Conference on Big Data Service and Applications, 2019. He also regularly serves as Program Committee Member for numerous national and international conferences.

Jemal Abawajy

Jemal Abawajy is a faculty member at Deakin University and has published more than 100 articles in refereed journals and conferences as well as a number of technical reports. He is on the editorial board of several international journals and edited several international journals and conference proceedings. He has also been a member of the organizing committee for over 60 international conferences and workshops serving in various capacities including best paper award chair, general co-chair, publication chair, vice-chair, and Program Committee. He is actively involved in funded research in building secure, efficient, and reliable infrastructures for large-scale distributed systems. Toward this vision, he is working in several areas including pervasive and networked systems (mobile, wireless network, sensor networks, grid, cluster, and P2P), e-science and e-business technologies and applications, and performance analysis and evaluation.

Oral Presentation Instruction

1. Timing: a maximum of 10 minutes total, including speaking time and discussion. Please make sure your presentation is well timed. Please keep in mind that the program is full and that the speaker after you would like their allocated time available to them.
2. You can use CD or USB flash drive (memory stick), and make sure you scanned viruses in your own computer. Each speaker is required to meet her/his session chair in the corresponding session rooms 10 minutes before the session starts and copy the slide file (PPT or PDF) to the computer.
3. It is suggested that you email a copy of your presentation to your personal inbox as a backup. If for some reason the files can't be accessed from your flash drive, you will be able to download them to the computer from your email.
4. Please note that each session room will be equipped with a LCD projector, screen, point device, microphone, and a laptop with general presentation software such as Microsoft PowerPoint and Adobe Reader. Please make sure that your files are compatible and readable with our operation system by using commonly used fronts and symbols. If you plan to use your own computer, please try the connection and make sure it works before your presentation.
5. Movies: If your PowerPoint files contain movies, please make sure that they are well formatted and connected to the main files.

Registration

Since the COVID-19 problem, ATCI 2021 will use online conference way. Authors do not need pay registration fee.

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