COMMUNICATION NETWORKS AND SERVICE MANAGEMENT IN THE ERA OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Edited by
Nur Zincir-Heywood | Marco Mellia | Yixin Diao

IEEE Press Series on Networks and Services Management
Veli Sahin and Mehmet Ulema, *Series Editors*

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Editor Biographies

Nur Zincir-Heywood received the PhD in Computer Science and Engineering in 1998. She is a full professor at the Faculty of Computer Science, Dalhousie University, Canada, where she directs the NIMS Research Lab on Network Information Management and Security. Her research interests include machine learning and artificial intelligence for cyber security, network, systems, and information analysis, topics on which she has published over 200 fully reviewed papers. She is a recipient of several best paper awards as well as the supervisor for the recipient of the IFIP/IEEE IM 2013 Best PhD Dissertation Award in Network Management. She is the co-editor of the book “Recent Advances in Computational Intelligence in Defense and Security” and co-author of the book “Nature-inspired Cyber Security and Resiliency: Fundamentals, Techniques, and Applications.” She is an Associate Editor of the IEEE Transactions on Network and Service Management and Wiley's International Journal of Network Management. She has been a co-organizer for the IEEE/IFIP International Workshop on Analytics for Network and Service Management since 2016. She served as Technical Program Co-chair for the IEEE Symposium on Computational Intelligence for Security and Defence Applications in 2011, International Conference on Network Traffic Measurement and Analysis in 2018, International Conference on Network and Service Management in 2019, and she served as General Co-chair for the International Conference on Network and Service Management in 2020. Professor Zincir-Heywood's research record was recognized with the title of Dalhousie University Research Professor in 2021.

Marco Mellia graduated with PhD in Electronic and Telecommunication Engineering in 2001. He is a full professor at Politecnico di Torino, Italy, where he coordinates the SmartData@PoliTO center on Big Data, Machine Learning and Data Science. In 2002, he visited the Sprint Advanced Technology Laboratories in Burlingame, CA, working at the IP Monitoring Project (IPMON). In 2011, 2012, and 2013, he collaborated with Narus Inc. in Sunnyvale, CA, working on traffic monitoring and cyber-security system design. In 2015 and 2016, he visited Cisco Systems in San Jose, CA, working on the design of cloud monitoring platforms. Professor Mellia has co-authored over 250 papers published in international journals and presented in leading conferences, all of them in the area of communication networks. He won the IRTF ANR Prize at IETF-88 and best paper awards at IEEE P2P'12, ACM CoNEXT'13, IEEE ICDCS'15. He participated in the program committees of several conferences including ACM SIGCOMM, ACM CoNEXT, ACM IMC, IEEE Infocom, IEEE Globecom, and IEEE ICC. He is the Area Editor of ACM CCR, IEEE Transactions on Network and Service Management and Elsevier Computer Networks. He is a Fellow of IEEE. His research interests are in the area of Internet monitoring, users' characterization, cyber security, and big data analytics applied to different areas.

Yixin Diao received the PhD degree in electrical engineering from Ohio State University, Columbus, OH, USA. He is currently a Director of Data Science and Analytics at PebblePost, New York, NY, USA. Prior to that, he was a Research Staff Member at IBM T. J. Watson Research Center, Yorktown Heights, NY, USA. He has published more than 80 papers and filed over 50 patents in systems and services management. He is the co-author of the book “Feedback Control of Computing Systems” and the co-editor of the book “Maximizing Management

Performance and Quality with Service Analytics." He was a recipient of several Best Paper Awards from the IEEE/IFIP Network Operations and Management Symposium, the IFAC Engineering Applications of Artificial Intelligence, and the IEEE International Conference on Services Computing. He served as Program Co-chair for the International Conference on Network and Service Management in 2010, the IFIP/IEEE International Symposium on Integrated Network Management in 2013, and the IEEE International Conference on Cloud and Autonomic Computing in 2016 and served as General Co-chair for the International Conference on Network and Service Management in 2019. He is an Associate Editor of the IEEE Transactions on Network and Service Management and the Journal of Network and Systems Management. He is a Fellow of IEEE.

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