



Jinsong Wu requests your support to vote for the position of Vice President Conferences 2026-2027 in the 2025 IEEE Communications Society (ComSoc) Elections.

Biography – Jinsong Wu

He was the leading Editor and a co-author of the comprehensive book, entitled “Green Communications: Theoretical Fundamentals, Algorithms, and Applications”, published by CRC Press in September 2012, which has been recognized as the very first comprehensive published book effort on green communications covering broad topics of green wireless communications, green wireline communications, general relevant green topics and applications in one book using a research perspective.

He was a long term promoter (during 2012-2015) of Green Tracks in the Selected Areas in Communications (SAC) Symposium in ComSoc flagship conferences. He was the earliest proposer (2012) and one of the primary proposers (2012-2015) and one of the primary promoters from SAC Green Track into a dedicated Green Symposium within ComSoc flagship conferences. Finally, the very first Green Symposium in ComSoc flagship conferences was approved in 2014, and started in IEEE ICC 2016, which now have been 19 successful editions. He has opened and established the Big Data Track series with a very general and wide topic coverage in the flagship conferences of IEEE Communications Society, starting at IEEE Globecom 2016, which now have been 18 successful editions. He was the Proposer and leading organizer, the First IEEE International Workshop on Green Standardizations and Industry Issues for ICT and Relevant Technologies (GSICT), in conjunction with IEEE Global Communications Conference (GLOBECOM 2015), which was the very first dedicated conference effort on green standardizations within the whole IEEE and ACM. He was General Chair in 2016 and 2018 International Conference on Computing, Communications and Informatics (ICACCI). He was the Symposium Co-Chair and Track Vice-Chair on Green Communication Systems and Networks of the Selected Areas in Communications Symposium, IEEE GLOBECOM 2012. He was Technical Program Committee Vice Co-Chair, Asia-Pacific Conference on Communications (APCC), Korea, 2012. He was the leading General Chair in 2013 IEEE International Conference on Green Computing and Communications (Greencom). He was steering committee members in IEEE Greencom from 2014 to 2022. He was the Technical Program Committee Chair of IEEE Online Conference on Green Communications (OnlineGreencom) in both 2012 and 2013, which was the earliest online conference within IEEE. He was the leading Program Chair of 2016 IEEE International Conference on Big Data Intelligence and Computing (DataCom). He was the Track Co-Chair on Green Communications and Networks, IEEE Vehicular Technology Conference Fall in 2014 and 2017. He was the proposers and Chairs of the Technical Panels on Green Communications and Computing in the IEEE INFOCOM 2012, ICC 2012, and Globecom 2012. He was leading proposer and Co-Chair of the Technical Panels on Big Data for Information and Communication Technologies in IEEE Globecom 2015. He was Program Chair of the 2018 IEEE International Environmental Engineering Conference, which is the first edition flagship conference of the IEEE Environmental Engineering Initiative (IEEE EEI, sponsors mainly from IEEE Systems Council as well as 25 IEEE Societies or organization units), a multidisciplinary collaboration across the whole IEEE directed to foster knowledge dissemination and innovation in environmental engineering and to promote a

sustainable future for the environment. He also has been also main organizers or steering committee members in many IEEE workshops, such as IEEE International Workshop on Cloud Computing Systems, Networks, and Applications (CCSNA) with 7 editions from 2013 to 2018, later transferred to IEEE International Workshop on Intelligent Cloud Computing and Networking (2018-2025, 7 editions). IEEE ICC 2014 Workshop on Energy Efficiency in Wireless Networks & Wireless Networks for Energy Efficiency (E2Nets), IEEE ICC 2015 International Workshop on Next Generation Green ICT, IEEE ICC 2015 IEEE Workshop on Next Generation Backhaul/Front haul Networks (BackNets'2015), IEEE INFOCOM 2016 International Workshop on Green and Sustainable Networking and Computing (GSNC), IEEE ICC 2017 International Workshop on Application of green techniques to emerging communication and computing paradigms (GCC), IEEE International Workshop on Data Driven Intelligence for Networks and Systems (DDINS, three editions at IEEE ICC 2019, IEEE INFOCOM 2020, IEEE ICC 2021, IEEE ICC 2022, IEEE ICC 2023, IEEE ICC 2024, IEEE ICC 2025).

From 2017 to 2022, he was elected Vice Chair Technical Activities, IEEE Environmental Engineering Initiative, a pan-IEEE effort under IEEE Technical Activities Board (TAB) across 26 IEEE Societies, Councils, and other organization units. He was Steering Committee Member and IEEE Communications Society Representative (2016-2022) in IEEE Environmental Engineering Initiative under IEEE Technical Activities Board (TAB). He was the founder and Founding Chair (2011-2017) of IEEE Technical Committee on Green Communications and Computing (TCGCC now with more than 1100 members), IEEE Communications Society, which was established in 2011 as an official IEEE Technical Subcommittee on Green Communications and Computing (TSCGCC) and elevated to TCGCC in 2013. He was the primary co-founder and founding Vice-Chair (2014-2022) and Chair (2022-2024) of the IEEE Technical Committee on Big Data (TCBD), which was established in January 2015 as an official IEEE Technical Subcommittee on Big Data (TSCBD) and elevated to IEEE TCBD in December 2016. Note that technical committees are the core forces of ComSoc. TCGCC and TCBD have been 2 out of total 26 full Technical Committees in the IEEE Communications Society with over 68 years history and currently over 30000 members. He was the Founder (in 2011), IEEE Green Communications and Computing LinkedIn Group (currently with over 1550 international members). He was Selection Committee Member, IEEE ComSoc Student Competition (2013-2014).

He was the very first proposer (in mid-2012) and a long term promoter of IEEE Green ICT Journals/Transactions. He is the proposer (2012), founder (2014), and Series Editor (2014-2018) of Series on Green Communication and Computing Networks in the IEEE Communications Magazine. He was Area Editor in IEEE Transactions on Green Communications and Networking (2016-2021). He was the original proposer (2012) and Series Editor (2014-2016) of the IEEE Journal of Selected Areas on Communications (JSAC) Series on Green Communications and Networking, Associate Editor of IEEE Systems Journal, Editor of KSII Transactions on Internet and Information Systems. He served as the leading Guest Editor of Special Issue on Green Communications, Computing, and Systems in IEEE Systems Journal, Associate Editor of Special Section on Big Data for Green Communications and Computing in IEEE Access, Guest Editor of Special Issue on Green Communications in Elsevier Computer Networks, the leading Guest Editor of Feature Topics Issue on Context-Aware Networking and Communications in IEEE Communications Magazine, Guest Editor of Special Issue on Smart Backhauling and Fronthauling for 5G Networks in IEEE Wireless Communications, Guest Editor of Special Issue on Mobile Clouds in IEEE Transactions on Cloud Computing, Guest Editor of Special Issue on Big Data and Artificial Intelligence for Network Technologies in IEEE Transactions on Network Science and Engineering, and Guest Editor of Special Issue on Wearable Sensor Based Big Data Analysis for Smart Health in IEEE Internet of Things Journal, the leading Guest Editor of IEEE Internet of Things Magazine Special Issue on Internet of Things and Edge Computing Meet Green Challenges. He has been leading Series Editor (2020-now) in Series on Data Driven Intelligence, Sustainability, and Systems, Intelligent and Converged Networks (Journal) by International Telecommunication Union (ITU) and

Tsinghua University Press (TUP), proposer (2021) and Founding Editor-in-Chief (2022-now), Green Technologies and Sustainability by KeAi.

He received 2020 IEEE Green Communications and Computing Technical Committee Distinguished Technical Achievement Recognition Award, for his outstanding technical leadership and achievement in green wireless communications and networking. He received 2017 IEEE Green Communications and Computing Technical Committee Excellent Services Award, for Excellent Technical Leadership and Services in the Green Communications and Computing Community. His first-authored paper received 2017 IEEE Systems Journal Best Paper Award. . His first-authored paper received IEEE Communications Society Big Data 2023 Best Influential Paper Award. His second-authored and corresponding-authored paper received 2021 IEEE Systems Journal Best Paper Award. He also received 2019 IEEE Systems Journal Best Paper Award and 2018 IEEE TCGCC Best Magazine Paper Award. He received three best paper awards for IEEE conference papers. His three publications were listed in IEEE ComSoc Best Readings in Green Communications in 2013. He also received IEEE Outstanding Leadership Award in 2013 IEEE International Conference on Green Computing and Communications (Greencom) and 2016 IEEE International Conference on Big Data Intelligence and Computing (DataCom), IEEE Computer Society.

For not short terms, he has lived and professionally worked in Asia, North America, and South America. For business trips, he has traveled to over 10s countries across Asia, North America, Latin America, Oceania, Europe, and Africa. He has accumulated solid working experiences of both industries and academic institutions relevant to information and communications technologies. He has worked on research and development in Nortel Networks, Sprint-Nextel, Alcatel-Lucent for a number of years. He has broad connections in both industrial and academic communities. He received his PhD from the Department of Electrical and Computer Engineering, Queen's University, Canada.