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DEREK ABBOTT (Fellow, IEEE) was born in South Kensington, London, U.K. He received the B.Sc. degree (Hons.) in physics from Loughborough University, Leicestershire, U.K., in 1982, and the Ph.D. degree in electrical and electronic engineering from The University of Adelaide, Adelaide, SA, Australia, in 1995.

From 1978 to 1986, he was a Research Engineer with the GEC Hirst Research Centre, London. From 1986 to 1987, he was a VLSI Design Engineer with Austek Microsystems, Australia. Since 1987, he has been with The University of Adelaide, where he is currently a Full Professor with the School of Electrical and Electronic Engineering. He has co-edited *Quantum Aspects of Life* (Imperial College Press, 2008) and coauthored *Stochastic Resonance* (Cambridge University Press, 2008) and *Terahertz Imaging for Biomedical Applications* (Springer-Verlag, 2012). His research interests include multidisciplinary physics and electronic engineering applied to complex systems, networks, game theory, energy policy, stochastics, and biophotonics. He has received a number of awards, including the Australian Research Council Future Fellowship, in 2012, the David Dewhurst Medal for biomedical engineering, in 2015, the Barry Inglis Medal for measurement science, in 2018, and the M. A. Sargent Medal for eminence in engineering, in 2019. He has served as the Guest Editor for IEEE JOURNAL OF SOLID-STATE CIRCUITS, in 1999, and an Associate Editor for IEEE PHOTONICS JOURNAL, from 2009 to 2014. He has served on the editorial board for PROCEEDINGS OF THE IEEE, from 2009 to 2014, and has been serving on the editorial board for IEEE ACCESS, since 2015. He also serves on the IEEE Publications Publication Services and Products Board (PSPB).



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SONIA AISSA (Fellow, IEEE) received the Ph.D. degree in electrical and computer engineering from McGill University, Canada, in 1998.

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Prof. Aissa is a fellow of the Canadian Academy of Engineering. She has an outstanding record of service to IEEE. Her awards include the NSERC University Faculty Award, in 1999, the FRQNT Strategic Faculty Fellowship, from 2001 to 2006, the INRS Performance Award for outstanding achievements in research, teaching, and outreach multiple times, since 2004, the FRQNT-SYTACom Technical Community Service Award, in 2007, the NSERC Discovery Accelerator Supplement Award, in 2013,

and multiple Best Paper Awards from the IEEE and the Japanese IEICE. She was a Member-at-Large of ComSoc's Board of Governors, from 2014 to 2016, and serves regularly on many of its standing committees. She has been involved in organizing many flagship conferences, including the 2021 IEEE International Conference on Communications for which she served as the TPC Chair. She is active in promoting women in engineering. She is the Founding Chair of the IEEE Women in Engineering Affinity Group in Montreal. Her editorial activities include: an Editor of IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, from 2004 to 2012, an Associate Editor and a Technical Editor of *IEEE Communications Magazine*, from 2004 to 2015, a Technical Editor of *IEEE Wireless Communications Magazine*, from 2006 to 2010, an Associate Editor of *Security and Communication Networks* (Wiley), from 2007 to 2012, and an Area Editor of IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, from 2014 to 2019. She also serves as the Editor-at-Large for IEEE TRANSACTIONS ON COMMUNICATIONS. She was a Distinguished Lecturer of the IEEE Communications Society (ComSoc), from 2013 to 2016.

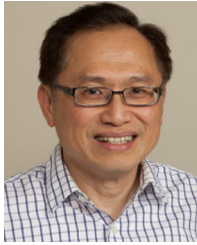


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ANURADHA ANNASWAMY (Fellow, IEEE) is currently the Founder and the Director of the Active-Adaptive Control Laboratory, Department of Mechanical Engineering, MIT. She is the author of over 100 journal publications and 250 conference publications, the coauthor of a graduate textbook on adaptive control, and the co-editor of several cutting-edge science and technology reports, including *Systems and Control for the Future of Humanity*, *Research Agenda: Current and Future Roles, Impact and Grand Challenges* (Annual Reviews in Control, 2016), *Smart Grid Control: Overview and Research Opportunities* (Springer, 2018), and *Impact of Control Technology* (IoCT-report 2011 and 2013). She has supervised over 25 Ph.D. students and 40 M.S. students, many of whom have won best student paper awards at conferences. She has been invited to give a number of plenary lectures at international conferences, such as the IEEE Systems and Man Cybernetics, in 2018, and the IEEE Conference on Control Technology and Applications, in 2018. Her research interests include adaptive control theory and its applications to aerospace, automotive, and propulsion systems as well as cyber-physical systems, such as smart grids, smart cities, and smart infrastructures. Her current research team of 15 students and postdoctoral is supported at present by the Air Force Research Laboratory, Boeing, Ford-MIT Alliance, the Department of Energy, and NSF.

She was elected to be a fellow of the IFAC, in 2017. She has been a member of the IEEE Fellow Committee and the IEEE Control Systems Society (CSS) Outreach Committee. She has received several awards, including the George Axelby, in 1986, and *IEEE Control Systems Magazine* Best Paper Award from the IEEE CSS, in 2010, the Presidential Young Investigator Award from NSF, in 1992, the Hans Fisher Senior Fellowship from the Institute for Advanced Study at Technische Universität München, in 2008, and the Donald Groen Julius Prize from the Institute of Mechanical Engineers, in 2008. She received the Distinguished Member Award and the Distinguished Lecturer Award from IEEE CSS, in 2017. She is actively involved in IFAC, IEEE, and IEEE CSS. She has served as the General Chair for the American Control Conference, in 2008, as well as the 2nd IFAC

Conference on Cyber-Physical and Human Systems, in 2018. She is the Chair of the IEEE Smart Grid Meetings and Conferences. She is also the Chair of the IEEE Smart Grid Meetings and Conferences. She has been the Deputy Editor of the *Annual Reviews in Control* (Elsevier), since 2016. In IEEE CSS, she has served as the Vice President of Conference Activities, from 2015 to 2016, Technical Activities, from 2017 to 2018, and the President, in 2020.



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Some of his recognitions include several excellence in teaching awards, a few best paper awards, the NCE Excellence in Research Award, the Thomas Alva Edison Patent Award, and the Purdue University Outstanding ECE Award. He has guest-edited a number of special issues covering various emerging topics in communications and networking. He has served on the editorial/advisory board for over ten journals. He has frequently been delivering keynote addresses, distinguished lectures, tutorials, and invited talks.



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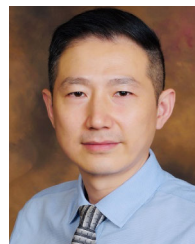
From June 2004 to April 2006, he was with McMaster University, Canada, as a Natural Sciences and Engineering Research Council of Canada (NSERC) Postdoctoral Fellow. From July 2006 to December 2018, he was with the Department of Electrical and Computer Engineering, University of Manitoba, Canada, where he was a Full Professor and the NSERC Industrial Research Chair. Since January 2019, he has been with the Department of Electrical and Computer Engineering, Concordia University, Canada, as a Full Professor and the PERFORM Centre Research Chair. His current research interests include edge/fog computing, eHealth, radio resource management in wireless communication networks, and performance analysis. He received the Best Paper Award from Chinacom, in 2013, the Rh Award for outstanding contributions to research in applied sciences from the University of Manitoba, in 2012, and the Outstanding Service Award from IEEE GLOBECOM 2010. He served as the Technical Program Committee (TPC) Co-Chair for IEEE GreenCom 2018; the Track/Symposium TPC Co-Chair for the IEEE VTC-Fall 2020, 2019, and 2012, IEEE CCECE 2017, IEEE GLOBECOM 2010, and IWCMC 2008; the Publicity Co-Chair for IWCMC 2010, 2011, 2013–2015, 2017, and 2020; and the Registration Chair for QShine 2005. He also served on the editorial board for IEEE INTERNET OF THINGS JOURNAL, *IET Communications*, and *Wireless Communications and Mobile Computing*.



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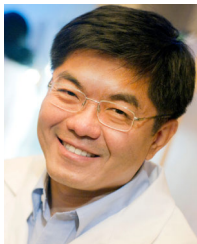


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YIXIN CHEN (Fellow, IEEE) received the bachelor's degree in computer science from the University of Science and Technology of China (USTC), in 1999, and the master's and Ph.D. degrees from the University of Illinois at Urbana-Champaign (UIUC), in 2001 and 2005, respectively. He was

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Chair for the IEEE International Conference on Big Data, in 2021, and an Associate Editor for *ACM Transactions on Computing for Healthcare*, *ACM Transactions of Intelligent Systems and Technology*, *Annals of Mathematics and Artificial Intelligence*, *Journal of Artificial Intelligence Research*, and IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING.



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J.-C. CHIAO received the Ph.D. degree in electrical engineering from the California Institute of Technology.

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Dr. Chiao was a recipient of the Lockheed Martin Aeronautics Company Excellence in Engineering Teaching Award, the Tech Titans Technology Innovator Award, the Research in Medicine Award in the Heroes of Healthcare, the IEEE Region 5 Outstanding Engineering Educator Award, the IEEE Region 5 Excellent Performance Award, the 2012–2014 IEEE MTT Distinguished Microwave Lecturer, the 2017–2019 IEEE Sensors Council Distinguished Lecturer, and the Edith and Peter O'Donnell Award in Engineering by The Academy of Medicine, Engineering and Science of Texas. He has been the Chair of several international conferences, including the 2018 IEEE International Microwave Biomedical Conference and the 2022 IEEE Sensors Conference. He was the Chair of the IEEE MTT-S Technical Committee "Biological Effect and Medical Applications of RF and Microwave" and the Technical Program Chair of the 2019 IEEE International Wireless Symposium and the 2021 Wireless Power Transfer Conference. He has been an Associate Editor of IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES; the Founding Editor-in-Chief of IEEE JOURNAL OF ELECTROMAGNETICS, RF, and MICROWAVES IN MEDICINE AND BIOLOGY; and a Track Editor of IEEE JOURNAL OF MICROWAVES.



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AYMAN EL-BAZ (Fellow, IEEE) received the bachelor's and master's degrees in electrical engineering, in 1997 and 2001, respectively, and the Ph.D. degree in electrical engineering from the

University of Louisville, Louisville, KY, USA, in 2006. He currently holds the positions of a Professor, a Distinguished University Scholar, and the Chair of the Bioengineering Department, University of Louisville. He is a Distinguished Academician. He boasts an impressive 23 years of hands-on experience in the areas of bio-imaging modeling, big data, artificial intelligence, and non-invasive computer-assisted diagnosis systems. As a Principal Investigator (PI) and a Co-Investigator (Co-I), he has successfully secured 50 grants totaling U.S. \$29.0 million from esteemed sponsors,

such as NIH, DOD, NSF, and the American Cancer Society. His scholarly contributions are equally prolific, with 50 books, 250 articles in prestigious high-impact journals, 300 papers in extremely selective peer-reviewed conferences within his field, 300 abstracts, 50 patents, two software licensing technologies, seven software copyrights, two tutorials, and 50 invited talks to his credit. His scholarly impact is evident through his impressive citation count of around 21,000, alongside a remarkable H-index of 70. His dedication to mentoring and advising is apparent, having guided and nurtured 29 students, culminating in the successful completion of 15 Ph.D. dissertations and 14 master's theses. His illustrious career has been marked by numerous accolades and recognitions. It began in 2009 when he was bestowed with the title of Coulter Fellow in recognition of his substantial contributions to biomedical translational research. His remarkable achievements continued to gain prominence, leading to his appointment as an American Institute for Medical and Biological Engineering (AIMBE) Fellow, in 2018, celebrating his exceptional accomplishments in the realm of medical imaging and his exemplary leadership in education, scholarship, and service within the field of bioengineering. In 2020, he earned the prestigious distinction of being named a National Academy of Inventors (NAI) Fellow, the first from the Middle East, in acknowledgment of his groundbreaking work in artificial intelligence (AI) and medical imaging (MI). The year 2022 witnessed his recognition as a Biomedical Engineering Society Fellow, honoring his invaluable contributions to the field of biomedical engineering and his inspirational leadership within the Biomedical Engineering Society. Further solidifying his reputation, he achieved the esteemed title of an IEEE Fellow, in 2023, for his profound contributions to artificial intelligence in medicine and his enduring leadership within the Biomedical Engineering Society. Notably, in 2017, the Biomedical Engineering Society entrusted him with the role of an ABET Program Evaluator, reflecting his standing as an authority in the field. His mentorship has yielded substantial recognition, with seven of his Ph.D. advisees earning the prestigious John M. Houchens dissertation awards. In addition, his research group has amassed a notable 189 national and international awards and travel scholarships, further underscoring his profound influence on the academic community.



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In college, he studied mathematics and astrophysics. Between college and graduate school, he worked in the start-up industry in Boston developing distributed systems for two different telecommunications companies, serving as a Software Engineer with Boston Technology, and as the Chief Engineer and a System Architect with Priority Call Management. In graduate school, he studied the design of operating systems and computer systems. He has worked in both industry and academia. He helped Micron design their new hybrid memory cube DRAM architecture. He redesigned Cray's memory controller for their Black Widow memory system. He helped Northrop Grumman design a system interconnect for their experimental ultra-low-power data center. He designed a high-performance memory system for the 1024-core Teraflux chip funded by the European Commission. He has collaborated with researchers with the Department of Energy on the design of their next-generation supercomputers. He currently works on the design of monolithic computer systems that integrate high-capacity restive RAMs directly into CMOS logic chips for high-performance, low-power, single-chip systems. He has written two textbooks on computer memory systems and over 80 articles on memory systems, computer design, embedded systems, operating system design, astrophysics, and algorithmic composition. He holds a patent in memory systems design and three patents in the circuit design of electric guitars.



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ABBAS JAMALIPOUR (Fellow, IEEE) received the Ph.D. degree in electrical engineering from Nagoya University, Japan, in 1996.

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He is currently a Board of Trustees Distinguished Professor with the University of Connecticut (UConn), the highest rank and honor bestowed on faculty by UConn, based on research, teaching, and service. He has over 1100 publications, including nine books, 58 book chapters, 538 peer-reviewed journal articles, and 522 conference proceedings. He has given over 250 plenaries, keynotes, and invited conference papers. His publications have been cited over 49000 times (H-index=104 and i10-index=716) according to Google Scholar. He is on the Most Cited Researchers List in Electrical and Electronic Engineering according to the Shanghai Academic Ranking of World Universities. He has supervised 175 master's and Ph.D. students, postdoctoral students, visiting professors, and scholars. He is a strong believer in international scientific exchange and collaboration. He has made seminal contributions to passive and active multi-dimensional imaging from nano to micro and macro scales. He has coauthored publications with over 300 different students, scientists, and engineers from Asia, Europe, North America, Latin America, and the Middle East. His papers have appeared in PROCEEDINGS OF THE IEEE, *Journal of the Royal Society*, *Physics Today*, *Advances in Optics and Photonics*, and *Nature*. His research has been cited in *Nature Physics*, *IEEE Spectrum*, *Science*, *New Scientist*, *OE Magazine*, *SPIE Newsroom*, *Optics and Photonics News*, *IEEE PHOTONICS JOURNAL*, *NASA*, and *National Science Foundation Newsletters*. His research interests include a broad range of transformative imaging approaches using optics and photonics.

Prof. Javidi has been named as a fellow of several societies, including Optica (OSA), SPIE, the American Institute for Medical and Biological Engineering, the European Optical Society, the National Academy of Inventors, and the Institute of Physics. From 2008 to 2011, he was elected by the members to serve on the Board of Directors of the SPIE. His research has been recognized by awards and prizes from major scientific societies. He has been awarded The Optica Society (a.k.a. OSA) Emmett Leith Medal and the C. E. K. Mees Medal, in 2019; the IEEE Photonics Society William Streifer Scientific Achievement Award, in 2019; the Optica Joseph Fraunhofer Award/Robert M. Burley Prize, in 2018; and the European Physical Society (EPS) Prize for Applied Aspects of Quantum Electronics and Optics, in 2015. He was awarded the IEEE Donald G. Fink Paper Prize, in 2008, chosen from among all, that is, over 130 IEEE TRANSACTIONS, journals, and magazines; the John Simon Guggenheim Foundation Fellow Award, in 2008; the Alexander von Humboldt Foundation Prize, in 2007; the SPIE

Technology Achievement Award, in 2008; and the SPIE Dennis Gabor Award in Diffractive Wave Technologies, in 2005. He was a recipient of the George Washington University's Distinguished Alumni Scholar Award, the university's highest honor for its alumni in all disciplines, in 2010. He was selected in 2003 as one of the nation's top 160 engineers between the ages of 30–45 by the National Academy of Engineering to be an invited speaker at The Frontiers of Engineering Conference. He has been an alumnus of the Frontiers of Engineering of the National Academy of Engineering, since 2003. Early in his career, the National Science Foundation (USA) named him a Presidential Young Investigator; and he received the Engineering Foundation and IEEE Faculty Initiation Awards. He is the founding chair of several conferences in optics and photonics sponsored by OSA, IEEE, and SPIE, and has chaired over 75 international conferences. He has served on the editorial board for the PROCEEDINGS OF THE IEEE (ranked number one among all electrical engineering journals with an impact factor of 9.1); the Founding Editorial Board for IEEE/OSA JOURNAL OF DISPLAY TECHNOLOGY; and on the Editorial Advisory Board for IEEE PHOTONICS JOURNAL (impact factor of 2.6). He was named an IEEE Photonics Society Distinguished Lecturer, in 2004 and 2005.



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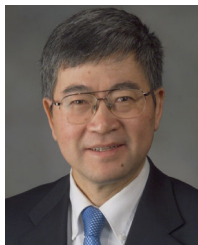


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