IEEE COMPUTER SOCIETY ENTERPRISE IT BODY OF KNOWLEDGE (EITBOK) NOW AVAILABLE FOR GLOBAL COMMUNITY REVIEW

The IEEE Computer Society (CS) Guide to the Enterprise Information Technology Body of Knowledge (EITBOK), a compendium of knowledge areas typically required for the successful delivery of IT services in an enterprise setting, is now available for global community review. EITBOK also covers concepts that are considered best practices and applicable to most IT efforts.

“We are grateful that so many distinguished industry leaders and subject-matter experts have contributed to EITBOK, and we are happy to make it available in wiki form to share with the enterprise IT community,” said Chuck Walrad, EITBOK editor in chief.

The full trial version of EITBOK is available for review, comments, and suggestions at eitbokwiki.org/Main_Page.

The EITBOK’s breadth of information includes links to a wide range of specialized BOKs in areas including business analysis, software and systems engineering, and data management. EITBOK is presented in an easy-to-navigate online format and also offers descriptions of major international frameworks for definitions of EIT competencies; defines a common international set of names for enterprise IT roles; links to a wide range of specialized BOKs; identifies relevant IEEE and ISO/IEC standards; and provides information on EIT maturity models and maturity assessments.

The IEEE CS supports the practice, education, research, workforce development, professional certification, and standards for the computing field through its activity in a variety of BOKs. To learn more, visit www.computer.org/web/education/itbok.

MATEO VALERO TO RECEIVE 2017 IEEE COMPUTER SOCIETY CHARLES BABBAGE AWARD

Mateo Valero, a professor in the Computer Architecture Department at Polytechnic University of Catalonia (UPC) and director of the Barcelona Supercomputing Center, has been selected to receive the 2017 IEEE CS Charles Babbage Award. This award recognizes significant contributions in the field of parallel computation in technical work, mentoring students, and community service.

Valero’s research focuses on high-performance architectures. An IEEE and ACM Fellow and an Intel Distinguished Research Fellow, he has published approximately 700 papers, helped organize more than 300 international conferences, and given more than 500 invited talks.

Valero has been the recipient of several significant awards, including the 2007 IEEE/ACM Eckert-Mauchly Award, the 2015 IEEE CS Seymour Cray Award, the 2009 IEEE Harry H. Goode Award, the 2012 ACM Distinguished Service Award, the 2015 Euro-Par Achievement Award, the Spanish National Award Julio Rey Pastor, the Spanish National Award Leonardo Torres Quevedo, the King Jaime I Award given by the Valencian government, and the Research Award given by the Catalan Foundation for Research and Innovation.

Valero obtained his telecommunications engineering degree from the Technical University of Madrid (UPM) in 1974 and his PhD in telecommunications from UPC in 1980. He has been teaching at UPC since 1974, and has been a full professor in the Computer Architecture Department since 1983. Valero has also been a visiting professor at ENSIMAG in France and at the University of California, Los Angeles. He has served as chair of the Computer Architecture Department as well as the Dean of the Computer Engineering School at UPC.

In 1998, Valero won a “Favourite Son” Award from his hometown, Alfamén (Zaragoza), and in 2006, Alfamén named their public college after him.

The Charles Babbage Award consists of a certificate and a $1,000 honorarium, and recipients are announced at the annual IEEE CS International Parallel and Distributed Processing Symposium (IPDPS). This award
covers all aspects of parallel computing including computational aspects, novel applications, parallel algorithms, theory of parallel computation, and parallel computing technologies, among others.

For more information about the award, including a list of past recipients, visit www.computer.org/web/awards/charles-babbage. For more information on IEEE CS awards, visit www.computer.org/awards.

SRINIVAS DEVADAS SELECTED TO RECEIVE IEEE COMPUTER SOCIETY 2017 W. WALLACE MCDOWELL AWARD

Srinivas Devadas, the Edwin Sibley Webster Professor of Electrical Engineering and Computer Science (EECS) at MIT, has been selected to receive the 2017 IEEE CS W. Wallace McDowell Award “for fundamental contributions that have shaped the field of secure hardware, impacting circuits, microprocessors, and systems.”

Devadas’s research interests span computer-aided design (CAD), computer security, and computer architecture, and he has received significant awards in each discipline. An IEEE and ACM Fellow, Devadas received the ACM/IEEE Richard Newton Technical Impact Award in Electronic Design Automation in 2015, and the IEEE CS Technical Achievement Award in 2014 for his work on secure hardware.

His 2004 work on processor-level information-flow tracking received the ASPLOS Most Influential Paper Award in 2014. His papers on analytical cache modeling and the Aegis single-chip secure processor are included as influential papers in “25 Years of the International Conference on Supercomputing.”

Devadas joined the MIT EECS faculty in 1988 and served as associate head of the Department of Electrical Engineering and Computer Science, with responsibility for computer science, from 2005 to 2011.

Devadas and his students invented silicon physical unclonable functions (PUFs) in 2002, which form the technological basis for an MIT hardware security spin-off company, Verayo. PUFs have been incorporated into products as diverse as Xilinx’s system-on-chip field-programmable gate arrays (FPGAs) to enable secure booting to RFID tags that are used to combat counterfeiting in commercial products such as Canon cameras.

Devadas has taught widely in EECS, including in the areas of VLSI, discrete mathematics, computer architecture, algorithms, and software engineering. He is a MacVicar Faculty Fellow and an Everett Moore Baker teaching award recipient, considered MIT’s two highest undergraduate teaching honors.

Devadas received his bachelor’s degree from the Indian Institute of Technology, Madras, in 1985, and his MS and PhD degrees from the University of California, Berkeley, in 1986 and 1988, respectively.

The W. Wallace McDowell Award honors individuals for their outstanding recent theoretical, design, educational, practical, or other innovative contributions in the field of computing. The award can also be given for a single contribution of great merit or a series of smaller contributions that have had or are expected to have an important influence on the computer field.

The award consists of a bronze medal and a $2,000 honorarium and was presented at the IEEE CS annual awards ceremony on 14 June 2017 in Phoenix, Arizona.

For more information on the award, including a complete list of past recipients, visit www.computer.org/web/awards/wallace.

KANIANTHRA MANI CHANDY AND JAYADEV MISRA TO RECEIVE IEEE COMPUTER SOCIETY 2017 HARRY H. GOODE MEMORIAL AWARD

Kaniantthra Mani Chandy, a professor in the Department of Computing and Mathematical Sciences at Caltech, and Jayadev Misra, a professor in the Department of Computer Science at the University of Texas at Austin, have been selected to receive the 2017 IEEE Computer Society Harry H. Goode Award for their “seminal contributions to distributed and parallel programming, including the development of the UNITY formalism.”

The award was established to recognize achievements in the information processing field that are considered either a single contribution of theory, design, or technique with outstanding significance, or the accumulation of important contributions on theory or practice over an extended time period.

Chandy is the Simon Ramo Professor Emeritus at Caltech. He has written books on performance modeling, concurrent programming, and event processing, as well as several papers on queuing networks, computer and communications performance modeling, distributed simulation, the development and verification of concurrent programs, compositional programming notations for parallel programs, and the detection of critical events from streams of data.

An IEEE Fellow since 1990, Chandy was also inducted into the US National Academy of Engineering in 1995 for “contributions to computer
performance modeling, parallel discrete-event simulation, and systematic development of concurrent programs.” He received the IEEE Koji Kobayashi Award in 1996 for “fundamental contributions to the theory and practice of computer and communications performance modeling.” His paper on distributed global snapshots, with Leslie Lamport, was placed in the ACM Operating Systems Hall of Fame in 2013 and was awarded the ACM Edsger W. Dijkstra prize in 2014.

Chandy received a bachelor’s degree in electrical engineering from the Indian Institute of Technology, Madras, in 1965; an MS in electrical engineering from the Polytechnic Institute of New York in 1966; and a PhD in operations research from MIT in 1969. He taught at the University of Texas at Austin from 1969 to 1987, and at Caltech from 1987 to 2014. He served as chairman of the Computer Science Department at UT and as Executive Officer at Caltech.

Misra is the Schlumberger Centennial Chair Emeritus and University Distinguished Teaching Professor Emeritus at the University of Texas at Austin. He works in the area of concurrent programming with emphasis on rigorous methods to improve the programming process. His work on the UNITY methodology, jointly with Chandy, has been influential in both academia and industry. He and Chandy (and, independently, Randy Bryant) pioneered the area of distributed discrete event simulation.

Misra is an IEEE and ACM Fellow. He was awarded the Doctor Honoris Causa by the Ecole Normale Superieure de Cachan, France, in 2010. He is a distinguished alumnus of the Indian Institute of Technology, Kanpur. Misra was a Guggenheim Fellow (1988–1989), the Strachey lecturer at Oxford University (1996), and the Belgian FNRS International Chair of Computer Science (1990). He is a member of the Academy of Distinguished Teachers at the University of Texas at Austin and was awarded the Regents’ Outstanding Teaching Award in 2010.

Misra received a B. Tech from the Indian Institute for Technology, Kanpur, in 1969 and a PhD from Johns Hopkins University in 1972. He has been at the Computer Science Department of the University of Texas at Austin since 1974, as assistant, associate, and full professor. Misra served as department chair from 1994 to 1997. He has been the past editor of several journals, including Computing Surveys, Journal of the ACM, Information Processing Letters, and Formal Aspects of Computing. He is the author of two books, Parallel Program Design: A Foundation (Addison-Wesley, 1988, co-authored with Chandy) and A Discipline of Multiprogramming (Springer-Verlag, 2001).

The Harry H. Goode Award consists of a bronze medal and a $2,000 honorarium. The award was presented at the IEEE CS annual awards ceremony on 14 June 2017 in Phoenix, Arizona. For more information about the award, including a list of past recipients, visit www.computer.org/web/awards/harrygoode.