the web site http://ieee-cis.org/edu/research/ or contact the subcommittee chair, Dr. Bernadette Bouchon-Meunier.

iv) The Student Games-Based Competition subcommittee is new to the CIS. We are actively exploring new ideas to support the mission of CIS educational activities. Currently we are planning on online based competition and on-site based competition. The online version will be announced and operated virtually with solutions submitted through web site. Winners will be announced through the web site as well after a panel of experts deliberates the results. The on-site competition will take place at major CIS conferences, which may include both software and hardware solutions. The co-chairs, Lingfeng Wang and Simon Lucas, of the subcommittee will communicate with the CIS students through the CIS web site to announce new competition opportunities.

v) Pre-College Activities subcommittee is also new to the CIS. Our immediate goal is to work closely with the IEEE Educational Activities Board to promote engineering in general and CIS fields of interest in particular. Our current subcommittee is led by and made up of dedicated volunteers with natural connections to and keen interest in pre-college education. We will especially champion one or two programs sponsored by the IEEE Educational Activities Board. This is also an area that we welcome CIS members worldwide to volunteer their time and expertise toward pre-college educational activities on behalf of the CIS.

vi) The University Curricula subcommittee is created from scratch with a goal to provide comprehensive course modules in the areas of computational intelligence to CIS members. Our approach is to identify subjects that have broad appeal to CIS members and possibly a larger audience. Another track will develop following the lead of popular text books. In the mean time, we also solicit course materials from CIS affiliated teaching faculty. Our first goal is to collect self-contained pdf course modules. Next, we will be seeking permission and collecting video course modules. As multimedia tutorials, the course modules will be archived in the CIS Educational Repository. Contact the subcommittee chair Ke Chen if you are interested in contributing.

vii) The Continuing Education subcommittee is a new creation with an emphasis on providing continuing education opportunities for practicing engineers. Our planned initiatives include: a) organizing short-term training courses and/or summer school for 1–2 weeks at a time; b) Providing seminars and workshops for 1–2 days each time; c) Producing tutorial videos with an industrial focus; and d) producing edited volumes and book series on computational intelligence to industrial application case studies. To reach our goal, the Continuing Education subcommittee led by Yaochu Jin will work closely with the Summer Schools, Multimedia Tutorials, and Education Repository subcommittees.

viii) The Educational Repository subcommittee is conceived to be at the center of the CIS educational activities in the sense that it will interact with almost all educational subcommittees. As discussed earlier, we will be creating a comprehensive, easy-to-use archive for users to access the state-of-the-art educational materials in the CIS fields of interest. To achieve this goal, the subcommittee chaired by Gwenn Volkert will be working closely with the CIS web master. The archive will be designed to host educational materials of different format and from different media. It will also include a search function for users to access our repository by searching key words, subject area, author name, or other prominent features.

In summary, the VPE office is new, so are many of our educational activities. We look forward to working with CIS members and to providing quality service to CIS members. If you have any questions regarding any of our educational activities or would like to just find out more information, please feel free to contact me or respective subcommittee chairs. Make sure to visit us at http://ieee-cis.org/edu/.

IEEE Fellows—Class of 2009

Xin Yao
The University of Birmingham, UK

Roberto Battiti, University of Trento, ITALY

For contributions to machine learning techniques for intelligent optimization and neural networks.

Digital Object Identifier 10.1109/MCI.2009.932263

Dr. Roberto Battiti is Full Professor of Computer Science at the University of Trento, Italy. He received an honors degree in Physics from the University of Trento, Italy, in 1985 and the Ph.D. degree in Computation and Neural Systems from the California Institute of Technology (Caltech), USA, in 1990. He has been a consultant in the area of parallel computing, neural networks and pattern recognition and since 1991 he has been a faculty member at the

University of Trento. From his Ph.D. study and dissertation, he is intrigued by issues at the boundary between optimization and machine learning. A first direction, of using optimization to solve machine learning problems, is a standard research stream where he contributed with accelerated optimization techniques for neural network training. The second direction, of using machine learning as an integral part of optimization heuristics, was more heretical and innovative and is now being recognized by a growing research community.

In particular, Battiti is the creator of Reactive Search, advocating the integration of sub-symbolic machine learning techniques into search heuristics for solving complex optimization problems. The word reactive hints at a ready response to events during the search through an internal online feedback loop for the self-tuning of critical parameters. Methodologies of interest for Reactive Search include machine learning and statistics, in particular reinforcement learning, active or query learning, neural networks, and metaheuristics, although the boundary signalled by the "meta" prefix is not always clear. Intelligent optimization, a superset of Reactive Search, refers to a more extended area of research, including online and offline schemes based on the use of memory, adaptation, incremental development of models, experimental algorithmics applied to optimization, intelligent tuning and design of heuristics.

He is the author of about 100 scientific publications, including the recent book *Reactive Search and Intelligent Optimization,* which led to hundreds of applications in widely different fields in the last years, and actively involved in a recent start-up initiative, Reactive Search SrL, which is designing some additional ones.

Sheng Chen, University of Southampton, UK

For contributions to intelligent learning systems and adaptive signal processing for communications.

Sheng Chen received his BEng degree from East China Petroleum Institute, China, in 1982, and his PhD degree from City University, London, in 1986, both in control engineering. From 1986 to 1999 he held research and academic appointments at University of Sheffield, University of Edinburgh and University of Portsmouth, all in UK. Since 1999, he has been with School of Electronics and Computer Science, University of Southampton, UK, where he is currently a professor of intelligent systems and signal processing. Professor Chen's research interests include adaptive signal processing for communications, wireless communications, modelling and identification of nonlinear systems, neural network and machine learning, and intelligent control systems. He has published over 350 research papers. Many of his research papers are influential and highly cited. His 1991 paper in TNN has an ISI citation index of over 1000 and it has over 1600 citations recorded by Googlescholar. Professor Chen is in the list of the top 250 highly cited researchers in the engineering category, in the ISI database of the world's most highly cited researchers. Dr Chen is a chartered engineer (CEng) UK, and a fellow of Institute of Engineering and Technology (FIET) UK. In 2005, he was awarded the Doctor of Sciences (DSc) by University of Southampton for his outstanding contributions to engineering research.

Lars Eriksson, Siemens Molecular Imaging, USA

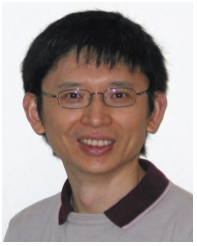
For development of instrumentation and methodologies for molecular imaging.

Lars Eriksson got his Ph.D in Nuclear Physics at the University of Stockholm, Sweden in 1973.

His career has spanned the entire history of PET, beginning with his work at UCLA in the mid 1970's working on the first generation PET system with the first images emerging in April-May of 1976. He then developed a higher resolution system consisting of a single ring of NaI(Tl) detectors with coworkers at the Karolinska Institutet/Hospital in 1976–1978. His and his colleagues development of a second generation systems was done in collaboration with Scanditronix with multiple rings of high efficiency BGO based detectors in order to achieve the higher sensitivity needed for clinical applications. Higher spatial resolution was achieved in the mid 1980's using an innovative approach of dual scintillator GSO/BGO phoswich detectors, also with Scanditronix. This design was used in a whole body scanner delivered to the Cancer Clinic in Heidelberg and a brain scanner delivered to the NIH in Washington, D.C. In the following years, 1985–1987, Lars' collaboration with Scanditronix lead to the development of the modified BGO block detector concept, and then a fourth generation system in 1988–1989 with block detectors and a large axial field of view. This model, originally ordered by the Max Planck Institute in Cologne, was later used as a template for the General Electric Advance system following GE's purchase of Scanditronix in 1990. Since 1997 Dr. Eriksson has worked at CTI (which merged with Siemens in 2005) on the design of numerous PET systems. This includes the phoswich panel system of the High Resolution Research Tomograph, the leading PET scanner for brain research, as well as a SPECT/PET panel design based on a combination of NaI(Tl) and LSO(Ce) block detectors. Image results from this design received the Image of the Year award at the Society for Nuclear Medicine meeting in Toronto 1998. The quest for higher sensitivity of PET systems has continued and resulted in several IEEE presentations and in presentations at the Imaging 2003 and Imaging 2006 conferences in Stockholm.

Gang (Gary) Feng, City University of Hong Kong, CHINA

For contributions to theory and application of fuzzy systems and control.



Gang Feng received the B.Eng and M.Eng. degrees in Automatic Control (of Electrical Engineering) from Nanjing Aeronautical Institute, China in 1982 and in 1984 respectively, and the Ph.D. degree in Electrical Engineering from the University of Melbourne, Australia in 1992. He has been with City University of Hong Kong since 2000 where he is now a professor and was lecturer/senior lecturer at School of Electrical Engineering, University of New South Wales, Australia, 1992–1999. He has won a number of prestigious awards, including Alexander von Humboldt Fellowship in 1997 and the IEEE Transactions on Fuzzy Systems Outstanding Paper Award in 2007. He was a visiting Fellow at National University of Singapore (1997), and Aachen Technology University, Germany (1997–1998). He has authored/co-authored over 150 international journal articles and numerous conference papers. His current research interests include piecewise linear systems, robot networks, intelligent systems and control, and systems biology. Prof. Feng is an associate editor of *IEEE Trans. Automatic Control*, *IEEE Trans. on Fuzzy Systems,* and *Journal of Control Theory and Applications,* and was an associate editor of *IEEE Trans. on Systems, Man & Cybernetics, Part C* and the Conference Editorial Board of IEEE Control System Society. He has been a program chair of a few international conferences including the 16th IEEE International Conference on Fuzzy Systems.

Fredric Ham, Florida Institute of Technology, USA

For leadership in neural network education, research and applications.

Dr. Ham is Harris Professor of Electrical Engineering at Florida Institute of Technology in Melbourne and Assistant Dean for Research in the College of Engineering. He is also the Director of the Information Processing Laboratory. During the 2004–2005 academic year he was the Interim Dean of the College of Engineering and from 2000–2005 he was the Associate Dean for Research in the College of Engineering. He worked 10 years in industry before coming to Florida Tech in 1988. He was with the Harris Corporation from 1980 to 1988 and the Shell Oil Company from 1976 to 1977. He is currently the President of the International Neural Network Society (2007–2008), President Elect of INNS (2006), and Secretary of INNS (2004–2005). He is a Senior Member of INNS, and was an Associate Editor for the *IEEE Transactions on Neural Networks* from 2001 to 2007. He has published over 100 technical papers and reports, mostly in the areas of neural networks, digital signal processing and biomedical engineering (specifically, biosensors). He holds 3 U.S. patents and is author of the textbook: *Principles of Neurocomputing for Science and Engineering*, McGraw-Hill, 2001. He served as Program Co-Chair for the IJCNN in 2005, and he has served on many organizing and program committees for several conferences. In 2008 he served as Conference Co-Chair for the SPIE Defense and Security Symposium, "Independent Component Analysis, Wavelets, Unsupervised Nano-Biomimetic Sensors, and Neural Networks VI," March 16–21 in Orlando, FL. He is currently serving as Conference Co-Chair for the SPIE Defense and Security Symposium, "Independent Component Analyses, Wavelets, Neural Networks, Biosystems, and Nanoengineering VII," April 13–17, 2009, Orlando, FL. Dr. Ham's current research interests include: applications of neural networks, adaptive signal processing, biosensor development for non-invasive blood glucose monitoring, and development of neural-based classification methods using infrasound for monitoring nuclear explosions to support the Comprehensive Nuclear Test Ban Treaty.

King Choi (Dominic) Ho, University of Missouri, USA

For contributions to active and passive signal source location technologies.

Dominic K. C. Ho received the B.Sc. degree (with First Class Honors) in 1988 and the Ph.D. degree in 1991, both from the Chinese University of Hong Kong. He was a research associate in the Royal Military College of Canada from 1991 to 1994. He joined Bell-Northern Research, Montreal, Canada in 1995 as a member of scientific staff. He was a faculty in the Department of Electrical Engineering at the University of Saskatchewan, Saskatoon, Canada from September 1996 to August 1997. Since September 1997, he has been on the faculty in the Electrical and Computer Engineering Department at the University of Missouri, Columbia. His research focuses on statistical signal processing, source localization, and subsurface object detection and classification. He has published over 160 refereed papers in technical journals and conference proceedings. He is the inventor/co-inventor of three United States patents, three Canadian patents, two patents in Europe and four patents in Asia on mobile communications and signal processing. Professor Ho has served as an Associate Editor of the *IEEE Transactions on Signal Processing* from 2003 to 2006, and the *IEEE Signal Processing Letters* from 2004 to 2008. He has been the editor of the ITU-T Standard Recommendation G.168: Digital

Network Echo Cancellers since 2002, and the ITU-T Standard Recommendation G.160: Voice Enhancement Devices since 2006.

Jong-Hwan Kim, Korea Advanced Institute of Science and Technology, KOREA

For contributions to evolutionary algorithms.

Jong-Hwan Kim received his B.S., M.S. and Ph.D. degrees in Electronics Engineering from Seoul National University, Korea, in 1981, 1983 and 1987, respectively. He then joined the Department of Electrical Engineering and Computer Science, KAIST, Korea, and is currently a full professor. Dr. Kim established two national research centers in 2000 and 2003, respectively, as Director and has been serving as Director for *KT Robo*-Lab@KAIST since 2007. His research interests include evolutionary algorithm, evolvable artificial creature, soccer robotics, ubiquitous and genetic robotics and cyber-physical robotic system. Dr. Kim has authored 5 books and 2 edited books, 2 journal special issues and around 300 book chapters and refereed papers in technical journals and conference proceedings. He currently serves as an Associate Editor of the *IEEE Transactions on Evolutionary Computation,* the *IEEE Computational Intelligence Magazine* and the *International Journal of Social Robotics*. Dr. Kim was one of the co-founders of the International Conference on *Simulated Evolution and Learning* (SEAL) in 1996. He was General Chair for the IEEE *Congress on Evolutionary Computation*, Seoul, Korea, 2001 and is General Chair for the IEEE *International Symposium on Computational Intelligence in Robotics and Automation*, Jeju Island, Korea, 2009 and Honorary Chair for *FIRA RoboWorld Congress*, Incheon, Korea, 2009. He has been on the program committees and advisory boards of more than 100 international conferences and co-chaired several international conferences. His name was included in the *Barons 500 Leaders for the New Century* in 2000 as *the Father of Robot Football*. He is the Founder of FIRA (The Federation of International Robosoccer Association) and IROC (The International Robot Olympiad Committee). He is currently serving FIRA and IROC as President. Dr. Kim was the recipient of the science and technology award from the President of Republic of Korea in 1997.

Kim Man, City University of Hong Kong, CHINA

For contributions to evolutionary optimization in industrial electronics.

Kim F. Man is a professor of Electronic Engineering Department at City University of Hong Kong. He received his PhD from Cranfield Institute of Technology at Bedford, England, UK in 1983. His research focuses on evolutionary computation with particular emphasis to industrial applications. He has recently developed a new Jumping Genes paradigm for evolutionary computation that can be applied to a whole range of industrial engineering designs such as antenna architectures, microwave devices, wireless network and control. He has co-authored three books in genetic algorithms and published extensively in the area. He now holds the position of Vice President for Technical Activities and senior Adcom member in the IEEE Industrial Electronics Society. He also serves on editorial boards of many journals including *IEEE Transactions of Industrial Electronics, IEEE Transaction of Industrial Informatics, Springer Verlag Advances in Industrial Control* and *Advisory Board of Real Time Systems journal*.

Juyang Weng, Michigan State University, USA

For contributions to computer vision and pattern recognition.

Juyang Weng received his BS degree from Fudan University, and MS and PhD degrees from University of Illinois, Urbana-Champaign, all in Computer Science. He is now a professor at the Department of Computer Science and Engineering, Michigan State University, East Lansing, Michigan. He is also a faculty member of the Cognitive Science Program and the Neuroscience Program at Michigan State University. He conducted research in motion analysis and structure from motion, for which the book *Motion and Structure from Image Sequences* he coauthored with Thomas S. Huang and Narendra Ahuja gave a summary. Later, he expanded his research interests to biologically inspired systems, especially the autonomous development of a variety of mental capabilities by robots and animals, including perception, cognition, behaviors, motivation, abstract reasoning and thinking skills. He has published over 200 research articles on related subjects, including task muddiness, intelligence metrics, mental architectures, vision, audition, touch, attention, recognition, autonomous navigation and other emergent behaviors. He is an editor-in-chief of *International Journal of Humanoid Robotics*, a member of Board of Governors of the International Neural Network Society, and an associate editor of the new *IEEE Transactions on Autonomous Mental Development*. He was a program chairman of the NSF/DARPA funded Workshop on Development and Learning 2000 (1st ICDL), the Chairman of the Governing Board of the International Conferences on Development and Learning (ICDL) (2005–2007, http://cogsci.ucsd.edu/~triesch/icdl/), a general chairman of 7th ICDL,

chairman of the Autonomous Mental Development Technical Committee of the IEEE Computational Intelligence Society (2004–2005), an associate editor of *IEEE Trans. on Pattern Recognition and Machine Intelligence*, an associate editor of *IEEE Trans. on Image Processing*. He and his coworkers developed SAIL and Dav robots as research platforms for autonomous development.

Takeshi Yamakawa, Kyushu Institute of Technology, JAPAN

For contributions in hardware implementation of fuzzy logic and other soft computing systems.

Takeshi Yamakawa is now a professor of Department of Brain Science and Engineering, Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology, Wakamatsu, Japan and also the chairman of Fuzzy Logic Systems Institute (FLSI). He received the B. Eng. degree in electronics engineering in 1969 from Kyushu Institute Technology, Tobata and the M. Eng. degree in electronics engineering in 1971 from Tohoku University, both in Japan. He received the Ph.D. degree for his studies on electrochemical devices in 1974 from Tohoku University, Japan. From 1974 to 1977, he engaged in the development of new electrochemical devices as a Research Assistant at Tohoku University. From 1977 to 1981 he served as a Research Assistant in electrical engineering and computer science at Kumamoto University, Japan. From 1981 to 1989 he was an Associate Professor at Kumamoto University. During this time, he developed intrinsic fuzzy logic integrated circuits in pMOS (1983) and CMOS (1985), a fuzzy logic controller hardware (1986), a fuzzy logic computer hardware (1986), a fuzzy memory device (1986), and fuzzy micro processors (rule chip and defuzzifier chip) (1988). He joined the Faculty of Computer Science and Systems Engineering, Kyushu Institute of Technology, Iizuka, Japan and received a full professorship in April 1989. He established a foundation, Fuzzy Logic Systems Institute (FLSI), in Japan in 1990 to promote the international collaboration on fuzzy logic, neural networks and soft computing, and to promote the spread of the research results. Prof. Yamakawa developed the fuzzy neuron chip in BiCMOS technology which facilitates hand-written character recognition within 1 microsecond by one fuzzy neuron chip (1991). He also developed the chaos chip in CMOS technology (1992). In 2000 he moved to the new campus, Wakamatsu, of the Kyushu Institute of Technology to be a professor of the Department of Brain Science and Engineering. His main research interest lies on hardware implementation of fuzzy systems, fuzzy neural networks, and chaotic systems. He holds 11 patents in U.S.A., 4 patents in Europe, 1 patent in Australia and 1 patent in Taiwan, and he has also applied for more than 90 patents in Japan. Prof. Yamakawa is a fellow of International Fuzzy Systems Association (IFSA) and Japan Society of Fuzzy Theory and Systems (SOFT). He received IEEE 2008 Fuzzy Systems Pioneer Award. He is acting as a member of editorial board and a regional editor of 10 international professional journals. He contributed more than 80 international conferences as a member or the chairman of organizing/programming committee. He was used to organize the International Conference on Fuzzy Logic, Neural Nets and Soft Computing (so called IIZUKA Conference) every two years in Iizuka, Japan. He was the director of the 21st Century Center of Excellence entitled "World of Brain Computing Interwoven out of Animals and Robots" from 2003 to 2008. And now he is acting as the director of the project for Specially Promoted Research (Project No.20001008) entitled "Identification of Epileptogenic Focus by Employing Softcomputing and Establishment of Minimally Invasive and Definitive Surgery" from June 2008 to March 2012.

Prof. Yamakawa plays Karate (Japanese traditional martial arts) and possesses a black belt (5th Dan). And he likes swimming, a monocycle and horse riding as well. His interest also lies on Shakuhachi and Shamisen, which are Japanese traditional musical instruments.

Qiang Yang, Hong Kong University of Science and Technology, CHINA

For contributions to understanding and application of intelligent planning, learning and data mining.

Qiang Yang received his Bachelor's degree from Peking University in Beijing, China in 1982 in the field of Astrophysics. He then joined the University of Maryland at College Park, in Maryland USA, and obtained his Masters degree in Astrophysics at University of Maryland in 1985. Subsequently, he obtained a Master's degree in Computer Science in 1987 and Ph.D. degree in Computer Science in 1989. In 1989, Dr. Qiang Yang joined University of Waterloo in Canada first as an assistant professor and then as an associate professor. In 1995, he joined Simon Fraser University in Canada as a Canadian NSERC Industrial Research Chair and developed an applied artificial intelligence research program with support from Canadian defense agency and Rogers Cable Labs. In 1999–2000, he spent his sabbatical at Microsoft Research Asia and University of Washington in Seattle.

Qiang Yang specializes in Artificial Intelligence and Data Mining. He is the author of two books: *Intelligent Planning—A Decomposition and Abstraction Based Approach*. Springer-Verlag, Berlin Germany. 1997 and *Constraint-based Design Recovery for Software Reengineering: Theory and Experiments*. Kluwer Academic Publishers, Boston

USA. 1997" (with Steven Woods and Alex Quilici). In AI planning, he has developed algorithms for merging plans and for planning with abstraction and constraints. In machine learning, he specializes in transfer learning. In data mining, his work spans Web mining and sensor network data mining. His work in data mining has won several prizes: his team of researchers and students has won the 2004 ACM KDDCUP championship on data mining on biological data, and 2005 ACM KDDCUP championship on data mining for Web search. He is an associate editor for several top quality journals including *IEEE Transactions on Knowledge and Data Engineering* and *IEEE Intelligent Systems.* He was honored in several top conferences in the past for his research works. He is the author of over 200 research papers in top level journals and conferences. He is the conference and program chair for many conferences, including international conference on case-based reasoning (2001), Pacific-Asia knowledge discovery and data mining conference (PAKDD) in 2007, pacific-rim AI conference in 2006 (PRICAI), and a tutorial chair for AAAI 2005 and 2006. He was also a workshop chair for ACM KDD 2007. He is now a professor at the Department of Computer Science and Engineering, Hong Kong University of Science and Technology, in Hong Kong, China.

Gary Yen, Oklahoma State University, USA

For contribution to intelligent systems and control.

Gary G. Yen received the Ph.D. degree in electrical and computer engineering from the University of Notre Dame, Notre Dame, Indiana in 1992. He is currently a Professor in the School of Electrical and Computer Engineering, Oklahoma State University, Stillwater, Oklahoma. Before joined OSU in 1997, he was with the Structure Control Division, U.S. Air Force Research Laboratory in Albuquerque, New Mexico. His research is supported by the DoD, DoE, EPA, NASA, NSF, and Process Industry. His research interest includes intelligent control, computational intelligence, conditional health monitoring, signal processing and their industrial/defense applications.

Gary Yen was an associate editor of the *IEEE Transactions on Neural Networks*, *IEEE Control Systems Magazine*, *IEEE Transactions on Control Systems Technology*, *Automatica*, and *IEEE Transactions on Systems, Man and Cybernetics, Part A and Part B.* He is currently serving as an associate editor for the *IEEE Transactions on Evolutionary Computation and Mechatronics*. He served as the General Chair for the *2003 IEEE International Symposium on Intelligent Control* held in Houston, TX and *2006 IEEE World Congress on Computational Intelligence* held in Vancouver, Canada. In addition, Dr. Yen served as Vice President for the Technical Activities of the IEEE Computational intelligence Society in 2005 and 2006 and is the founding editor-in-chief of the *IEEE Computational Intelligence Magazine* since 2006. He is elected to serve as President-Elect in 2009, President in 2010 and 2011 of the IEEE Computational Intelligence Society.

Ryuichi Yokoyama, Waseda University, JAPAN

For leadership in electrical power system management.

Ryuichi Yokoyama received the degrees of B.S., M.S. and Ph.D. in electrical engineering from Waseda University, Tokyo Japan, in 1968, 1970 and 1974, respectively. After being engaged in Mitsubishi Research Institute, from 1978 through

Call for Fellow Nomination

by Xin Yao, Fellows Committee Chair

Nominations are now being accepted for the IEEE Fellows class of 2010. If you know a colleague who has made outstanding contributions to the electrical and electronics engineering profession, consider nominating him or her as an IEEE Fellow. The deadline for nominations is 1 March 2009.

The grade of Fellow recognizes unusual distinction in the profession and shall be conferred by the Board of Directors upon a person with an extraordinary record of accomplishments in any of the IEEE fields of interest. The accomplishments that are being honored shall have contributed importantly to the advancement or application of engineering, science and technology, bringing the realization of significant value to society. The IEEE Fellows are an elite group from around the globe. The IEEE looks to the Fellows for guidance and leadership as the world of electrical and electronic technology continues to evolve.

The nominee shall hold Senior Member grade at the time the nomination is submitted and shall have been a member in good standing in any grade for a period of five years or more preceding 1 January of the year of elevation. Any person, including a non-member, is eligible to be a nominator with the following exceptions: members of the IEEE Board of Directors, the IEEE Fellow Committee, IEEE Technical Society/Council Fellow Evaluation Committees, or IEEE staff.

You may learn more about the process at Steps to Becoming a Fellow (http://www.ieee.org/web/membership/fellows/fellow_steps.html) through nomination by others, begin the actual nomination process at Applications and Instructions (http://www.ieee.org/web/membership/fellows/fellow_apps.html) or contact us at fellows@ieee.org for additional information.

2006, he worked in the Faculty of Technology of Tokyo Metropolitan University, and since 2007, he has been a professor at the Graduate School of Environment and Energy Engineering in Waseda University, Japan. His fields of interest include planning, operation and optimization of large-sale environment and energy systems and applications of advanced mathematical approaches to energy systems and markets. Prof. Yokoyama is senior members of IEEE of USA and the IEE of Japan and members of IID of Japan, CIGRE, etc.

Prof. Yokoyama has been conducting his research work actively and continuously and been publishing many papers and reports with high quality for more than 40 years. His technical approaches are practical and unique. His attitude toward research works always aims at being "practical and applicable to real systems" by making use of the state-of-the-art technique", and by taking up "the world wide cutting edge topics". This attitude for research activities attracts not only Japanese but also oversea students and his technical contribution to power system engineering fields is extensive and remarkable.

Prof. Ryuichi Yokoyama played decisive roles in power system planning and operation under deregulated environment. He is one of the most significant leaders of deregulation in power markets. His foreseeable and advanced view promoted the introduction of competition and deregulation to power markets. His recent major contribution is dedicated to design and operation of power systems and markets. Prof. Yokoyama has been involved in various committees conducted by Japanese governmental organizations as a chairperson and a member. He steered the committees well and played a major role there. His judgments and negotiations are highly evaluated and he received a trust from various organizations such as power utilities and third parties. In 2009, he received the Achievement Award from the Institute of Electrical Engineering of Japan for his long-term contributions to power and energy engineering field.

David Zhang, The Hong Kong Polytechnic University, CHINA

For contributions to biometric identification and systems.

David Zhang graduated in Computer Science from Peking University. He received his MSc in Computer Science in 1982 and his PhD in 1985 from the Harbin Institute of Technology (HIT). From 1986 to 1988 he was a Postdoctoral Fellow at Tsinghua University and then an Associate Professor at the Academia Sinica, Beijing. In 1994 he received his second PhD in Electrical and Computer Engineering from the University of Waterloo, Ontario, Canada. Currently, he is a Chair Professor at the Hong Kong Polytechnic University where he is the Founding Director of the Biometrics Technology Centre (UGC/CRC) supported by the Hong Kong SAR Government in 1998. He also serves as Visiting Chair Professor in Tsinghua University, and Adjunct Professor in Shanghai Jiao Tong University, Harbin Institute of Technology, and the University of Waterloo. He is the Founder and Editor-in-Chief, International Journal of Image and Graphics (IJIG); Book Editor, Springer International Series on Biometrics (KISB); Organizer, the International Conference on Biometrics Authentication (ICBA); Associate Editor of more than ten international journals including *IEEE Transactions and Pattern Recognition;* Technical Committee Chair of IEEE CIS and the author of more than 10 books and 200 journal papers. Professor Zhang is a Croucher Senior Research Fellow, Distinguished Speaker of the IEEE Computer Society, and a Fellow of IAPR.

Newly Elected CIS Administrative Committee Members (2009–2011)

David B. Fogel
Lincoln Vale CA LP
and Natural Selection, Inc., USA

Jim Bezdek
University of West Florida, USA

Jim received the PhD in Applied Mathematics from Cornell University in 1973. Jim's history: past president of NAFIPS (North American Fuzzy Information Processing Society), IFSA (International Fuzzy Systems Association) and the IEEE CIS (Computational Intelligence Society): founding editor the Int'l. Jo. Approximate Reasoning and the IEEE Transactions on Fuzzy Systems: fellow of the IEEE and IFSA: recipient of the IEEE 3rd Millennium, IEEE CIS Fuzzy Systems Pioneer, and IEEE CIS Rosenblatt medals. Jim's interests: woodworking, optimization, motorcycles, pattern recognition, cigars, clustering in very large data, fishing, co-clustering, blues music, and visual clustering.

James M. Keller
University of Missouri-Columbia, USA

James M. Keller received the Ph.D. in Mathematics in 1978. He holds the University of Missouri Curators'

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