The 2019 IEEE Computer Society: Hit Target on Member Satisfaction and Technical Excellence

Cecilia Metra, 2019 IEEE Computer Society President

To better serve members, wherever they are geographically located, whichever language they speak, and beyond gender and nationality; to enable the technical growth and professional advancement of each member; to move to higher pinnacles the technical distinction of our Society, in all activities and across the world—these were the targets of the renewed 2019 IEEE Computer Society. At the end of 2019, I am very glad and proud to announce that all of these, and many more, have been achieved.

echnology is rapidly evolving in computing and computing engineering; this continuously creates new opportunities for the advancement of science and humanity, but it also poses new scientific challenges. To maintain its leading role, the IEEE Computer Society (CS) must incorporate a dynamic evolution in all activities, products, and services, for the benefit of its members

To meet this challenge, one year ago, in the *Computer January* 2019 issue, I presented member satisfaction and technical excellence as targets for my presidential year. Now, at the end of 2019, I am very glad and proud to announce that, with the cooperation of all CS constituencies and the IEEE, we have been able to hit all of them, and much more.

Particularly, at the beginning of 2019, together with the CS Board

of Governors and staff, we defined the following shared goals to enable the CS to hit these targets: 1) increase member satisfaction; 2) enhance diversity, in gender,

and humanity.

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PRESIDENT CECILIA METRA



age, geographic location, and industry/academic affiliation; 3) boost technical excellence in all activities; 4) improve financial sustainability and transparency. Let me describe in more detail how we were able to reach each one of these goals.

INCREASE MEMBER SATISFACTION

The CS is a community of 80,000, widespread throughout the world. Increasing member satisfaction is a major objective, since there is no CS without its members.

To reach this goal, in March 2019, together with the Board of Governors, and with the support of the CS Executive Director, Melissa Russell, and staff, we created and launched a Service Survey form, that is automatically sent to all users of our educational and conference services (such as hotel contract management, conference registration, etc.). We keep on monitoring the received feedback for further improvement, and we offer to the users of our services the possibility to be called back by representatives of the CS, should a personal interaction be preferred to the anonymous submission of the completed survey. Our objective is to receive recommendations on how to improve on such services, to increase our members' and users' satisfaction.

CS students and professionals are gathered together into 543 Chapters, geographically distributed throughout 92 countries. Enhanced networking and interaction among Chapters had been expressed as a need for possible improvement. To satisfy this request, and foster networking among CS Chapters, as well as their engagement with industry for professional growth, this year, together with the CS Vice President for Member and Geographic Activities, Dr. Yervant Zorian, the Board of Governors, and staff, we have been able



Members of the 2019 CS Board of Governors: (back row, from left) David S. Ebert, Carlos E. Jimenez Gomez, Riccardo Mariani, Erik Jan Marinissen, William D. Gropp, John W. Walz, Fred Douglis, M. Brian Blake, and Gregory T. Byrd; (middle row, from left) Ramalatha Marimuthu, Kunio Uchiyama, Sy-Yen Kuo, Fabrizio Lombardi, John D. Johnson, Sumi Helal, Jill I. Gostin, Yervant Zorian, Saurabh Bagchi, and Andy T. Chen; and (front row, from left) Dimitrios Serpanos, Avi Mendelson, Leila De Floriani, Cecilia Metra, Hironori Kasahara, Forrest Shull, David Lomet, and Melissa A. Russell.

to organize and co-sponsor the "1st **IEEE Computer Society Global Chapter** Summit"! This in-person meeting will take place on December 7th, in Bologna, Italy, with the sponsorship of the IEEE and the CS, and with the support of the IEEE European office, the School of Engineering of the University of Bologna, the Department of Electrical, Electronic, and Information Engineering "Guglielmo Marconi" (DEI) of the University of Bologna, and the Department of Computer Science and Engineering (DISI) of the University of Bologna. We will offer free registration to all participants, and refund travel expenses to several CS Chapters' representatives. The Summit will be oriented to CS Chapters' networking and engagement with industry. Several technical experts from leading companies will participate, present their vision on future technological challenges, and network with participants, through properly organized discussion tables, for improved personal interaction. The Summit will also be an opportunity for the IEEE and the CS to explore new meeting formats

for community building and networking. Being able to organize the "1st IEEE Computer Society Global Chapter Summit" is the outcome of a presidential year focused on collaboration and cooperation among all IEEE and CS constituencies. I would like to thank the IEEE European office Director, Dr. Clara Neppel, and the IEEE Member and Geographic Activities Managing Director, Cecelia Jankowski, for this wonderful opportunity for the CS. Of course, also a special thanks is owed to the CS Executive Director, Melissa Russell, the CS Director of Membership, Eric Berkowitz, and his team, the IEEE Vienna office Executive Administrator, Tania Sánchez-Juárez, and all CS staff for having worked so hard to make this important event take place.

In addition, under the leadership of the Vice President for Member and Geographic Activities, Dr. Yervant Zorian (Synopsys, USA), and with the significant contribution of the whole Member and Geographic Activities Board and staff, this year 33 new CS Chapters and Student Branches were established, the latest of which



The June 2019 IEEE Computer Society Awards Ceremony: (back row, from left) Michelle Tubb, Adelia de Oliveira Dias, Erik Jan Marinissen, Sy-Yen Kuo, Dimitrios Serpanos, M. Brian Blake, Melissa A. Russell, Fred Douglis, Saurabh Bagchi, David Lomet, Kunio Uchiyama, Forrest Shull, Dongrui Fan, Riccardo Mariani, John Johnson, William D. Gropp, Patricia Gropp, Paolo Montuschi, Avi Mendelson, Carlos Jimenez Gomez, Sumi Helal, Iwao Hyakutake, Fabrizio Lombardi, Edwin Hernandez, Gregory T. Byrd, Connie Byrd, Shin-ichi Minato, Anne Marie Kelly, and Andy T. Chen; (front row, from left) Jill I. Gostin, Ramalatha Marimuthu, Leila De Floriani, Tina Stephens, Adrian Stephens, Julie Kessler, Robert R. Kessler, Susan H. Rodger, Cecilia Metra, Laura Haas, Rajesh K. Gupta, Jitendra Malik, Hironori Kasahara, John W. Walz, Ann Walz, Takuya Maekawa, and Atsushi Shimada.

is based in Michigan. Moreover, an ad hoc committee chaired by the Board of Governors member Dr. Erik Jan Marinissen (imec, Belgium) was formed to evaluate the value proposition of membership benefits and prepare new recommendations in this regards. Additionally, this year, we promptly responded to the invitation of the IEEE Working Group on Africa and Education to contribute to their efforts for continuing education and professional development of engineering professionals in Africa. With the unanimous vote of the Board of Governors, we enthusiastically accepted to sponsor lectures for continuing education in computing for some states in Africa, where special needs had been expressed from this point of view.

The CS serves our technical community by offering more than 30 peer reviewed periodicals (21 journals and 12 magazines). This year, under the leadership of the Vice President for Publications, Prof. Fabrizio Lombardi (Northeastern University, USA), and with the significant contribution of the whole Publications Board and staff, we succeeded in substantially reducing the delay from submission to e-publication of nearly all CS periodicals, while still retaining a very competitive acceptance rate in the review process of submitted

manuscripts. Additionally, to satisfy the needs of those authors that prefer, or are mandated, to publish in an Open Access format, this year we have executed all required steps to launch a new open access publication: the IEEE Open Journal of the Computer Society. Like all other CS publications, this new periodical will be peer reviewed, but it will feature a very fast acceptance/rejection decision from submission time. Another concern from several authors that we have been able to start satisfying this year is the increase in the number of published pages for CS sponsored publications. After many years of financial difficulty, this year we have been able to provide some funding for an initial increase in the number of published pages for **2019**. This is the first step towards a more timely final publication of all accepted articles, as required by several authors.

The CS serves its members also through a very active involvement in new IEEE standards' development. This year, under the leadership of the Vice President for Standards Activities, Dr. Riccardo Mariani (Nvidia, USA), and with the significant contribution of the whole Standards Activities Board and staff, we established methods to monitor continuously

member satisfaction and standards' quality, such as the preparation of a quarterly based standards' quality dashboard, and the use of social networks to collect ideas and feedback. The dashboard showed the good health of CS standardization activities. This year, the CS Standards Activities Board is supporting 14 standards committees, with 195 working groups, out of which 77 have active projects. The number of active standards is 261, with 129 active Project Authorization Requests (PARs) and 21 pending.

The CS offers to its members also several educational products and services (e-learning courses, training and certification programs, curricula development, etc.), oriented to undergraduate and PhD students, as well as practitioners. This year, under the leadership of the Vice President for Professional and Educational Activities, Dr. Kunio Uchiyama (Hitachi, Japan), and with the significant contribution of the whole Professional and Educational Activities Board and staff, we enhanced CS e-learning courses and certification programs to satisfy the educational needs of several of our members. Particularly, we focused on the digitization of educational contents for all knowledge areas of SWEBOK (Software Engineering Body of Knowledge), and on the

development of cybersecurity certification programs with the International Institute of Business Analysis.

The CS serves its members also by sponsoring (financially and/or technically) more than 200 technical conferences per year, as well as supporting 30 Technical Committees and Councils (TCs), each addressing major technical challenges in the field of computer engineering and computer science. This year, under the leadership of the Vice President for Technical and Conference Activities, Prof. William Gropp (University of Illinois at Urbana-Champaign, USA), and with the significant contribution of the whole Technical and Conference Activities Board and staff, we have financially and/or technically sponsored 207 technical conferences, some of which broke attendance records.

Moreover, this year, under the leadership of the CS Executive Director, Melissa Russell, and the Director of Marketing and Sales, Michelle Tubb, and her team, the CS staff created new services to better assist conference organizers, including web design, marketing, public relationship, and exhibit and sponsorship sales. Additionally, with the cooperation of the staff of other IEEE Societies and the IEEE Meetings Division, the CS staff succeeded in streamlining the conference contract process, thus cutting the processing time by nearly half the number of days (with 50% fewer approvers in the process), previously a concern for several of our members.

Additionally, this year, under the leadership of the CS Executive Director, Melissa Russell, and the Director of Information Technology and Services, Sumit Kacker, and his team, we launched the new CS website, enabling the simpler identification of content of interest to members and a faster, more dynamic access to it.

In addition to responding to our members' needs, every year the CS awards the brightest luminaries and scientists in the field of computer

science and computer engineering through its annual award program and ceremony. This year, under the leadership of the Award Committee Chair, Prof. Paolo Montuschi (Politecnico di Torino, Italy), and with the significant contribution of the whole Award Committee, and the support of the CS Associate Executive Director, Anne Marie Kelly, and her team, we have been able to award extraordinary leaders and pioneers, who had a profound impact on computer science and computer engineering, and who contributed to the progress of humanity through computing. For the first time, this year the CS award ceremonies adopted professional videos created by the **CS staff** to celebrate the outstanding discoveries of the awardees. This enabled us to devise the deserved honor to our excellent awardees, without exposing the CS to any financial risk. It has been an excellent collaborative effort from all staff members. whose results have been outstanding and quite appreciated by our honorable awardees. Together with the CS awards, this year we also celebrated the CS joint awards with the China Computer Federation (CCF) and the Information Processing Society of Japan (IPSJ), two Sister Societies with whom the CS has been collaborating for many years.

All the activities described above, which we have performed in 2019 to improve member satisfaction, have been made possible thanks to the strong collaboration of all CS constituencies and staff, as well as the constructive cooperation of other IEEE Societies, Initiatives, Committees, and staff. This has enabled us to achieve goals that we would not have been able to reach alone, and this is a cooperation that I hope will continue and be enhanced in the future, since being part of the multidisciplinary IEEE is certainly also one of the strengths of our CS. I hope that these activities will enable us to enhance member retention and increase the number of our already numerous

members, as a means to improve our community representativeness worldwide, thus fostering the professional and personal benefits deriving from being part of such a global technical community, as our CS that, in turn, is an active and collaborative portion of the broader, interdisciplinary IEEE.

ENHANCE DIVERSITY IN GENDER, AGE, GEOGRAPHIC LOCATION AND ACADEMIC/INDUSTRY AFFILIATION

We all know that, everywhere in the world, the percentage of women in computing is lower than that of men. However, in some geographic areas, the numbers are more unbalanced than in others, maybe for historical and cultural reasons. To enhance diversity in gender and promote women in computing, this year we devoted particular efforts to include female technical experts in all CS Boards and Committees, as much as possible.

Moreover, in order to try to solicit women to continue in their professional career in computing, this year, together with the Board of Governors, and with the support of the CS Executive Director, Melissa Russell, and the CS Associate Executive Director, Anne Marie Kelly, and her team, we created and funded conference participation grants for young women to attend some CS conferences held in IEEE Region 10 and Region 8 (particularly, in Georgia, India, and the United Arab Emirates).

In addition, in order to clearly show the CS commitment to supporting women in computing, this year we unanimously voted to name the prestigious CS Pioneer Award and the CS Undergraduate Teaching Award after women; these were the two major CS awards not yet named after anyone. Particularly, the CS Pioneer award had deliberately not been named after anyone since its institution. However, this year, with the support of the CS Awards Committee, chaired by Prof. Paolo Montuschi (Politecnico di Torino, Italy), we are moving forward with

renaming it after women names, as proof of the CS's strong commitment to supporting women in computing.

Also, in 2019, with the support of the Board of Governors, and the sponsorship of the CS, our representative at the IEEE Women in Engineering Affinity Group, Prof. Ramalatha Marimuthu (Kumaraguru College of Technology, India) co-organized a Special Session to discuss the difficulties encountered by women in computing at an international conference that took place in Japan, and a Returning Mothers event in India, to provide technical updates to women who are on maternity leave.

Additionally, under the leadership of the Vice President for Technical and Conference Activities, Prof. William Gropp (University of Illinois at Urbana-Champaign, USA), an Ad Hoc Committee on Equity, Diversity, and Inclusion (EDI) has been created, focused on disseminating the CS EDI statement for conferences, and gathering and sharing best practices within Technical Committees/Councils and conferences. Moreover, panels to discuss women in computing related issues have been organized at several CS sponsored conferences, as well as tracks on women in computing.

To enhance diversity in age, in addition to the Conference Participation Grants for young women in computing that we created and funded for 2019, and the 1st IEEE Computer Society Global Chapter Summit that we created and organized for December 2019, together with the Board of Governors member Prof. Saurabh Bagchi (Purdue University, USA), the whole Board of Governors, and with the support of staff, we are trying to organize a worldwide student challenge competition in computing for 2020.

Moreover, this year, with the support of the CS Executive Director, Melissa Russell, and the Director of Information Technology and Services, Sumit Kacker, and his team, we are fostering the increase in audio-video content on the CS website, as well as the CS activity on social media,

especially for enhanced outreach to young generations.

Additionally, in order to stimulate further student recruitment, under the leadership of the Vice President for Member and Geographic Activities, Dr. Yervant Zorian (Synopsys, USA), and with the significant contribution of the whole Member and Geographic Activities Board and staff, this year we developed a Faculty Ambassador Kit, to continue building awareness of the CS and encourage faculty to involve students in their area.

To enhance diversity in geographic location, and to break existing language barriers among members, this year, together with the Board of Governors member Carlos E. Jimenez Gomez (Independent Consultant, USA), the whole Board of Governors, and with the support our Executive Director Melissa Russell, and the Director of Information Technology and Services, Sumit Kacker, and his team, we started working on translating some content of our website into multiple languages.

Moreover, this year we launched a new Computer magazine China, whose content includes translated papers from the English language version of Computer, as well as additional original and more regional content in Chinese.

In addition, to incorporate the opinion of diverse geographic areas, under the leadership of the Vice President for Professional and Educational Activities, Dr. Kunio Uchiyama (Hitachi, Japan), and with the significant contribution of the whole Professional and Educational Activities Board and staff, the professional and educational activities have been distributed around the world. As examples, the CC (Computing Curricula) 2020 project had its general meetings in China and India this year, SWEBOK lectures were given in Taiwan, and e-learning contents of SWEBOK were deployed in India.

Moreover, under the leadership of the Vice President for Member and Geographic Activities, Dr. Yervant Zorian (Synopsys, USA), and with the significant contribution of the whole Member and Geographic Activities Board and staff, we have been able to expand the Society's footprint in new and emerging regions. We **boosted the Distinguished Visitor Program**, which continues to be an effective tool to serve geographically dispersed members.

Moreover, under the leadership of the Vice President for Standards, Dr. Riccardo Mariani (Nvidia, USA), and with the significant contribution of the whole Standards Board and staff, this year, we created geographically distributed industrial support teams to provide us with feedback on how to increase industrial engagement in the different geographic areas, based on their diverse industries' needs.

To enhance diversity in industry/ academic affiliation, we tried to increase industry engagement on all activities. Particularly, at the beginning of my Presidential term, with the Board of Governors consent, industrial experts were appointed as **Vice Presidents for the majority of the CS Program Boards.** Similarly, in all Program Boards and Committees, we tried to balance as much as possible industry and academic representativeness.

Moreover, together with the Board of Governors and staff, this year we started the creation of a new CS Committee for Industry Engagement.

Additionally, under the leadership of the Vice President for Standards, Dr. Riccardo Mariani (Nvidia, USA), and with the significant contribution of the whole Standards Board and staff, this year participation of industry members has been fostered by establishing three new standard committees (Blockchain and Distributed Ledgers, Smart Manufacturing, and Data Compression), and by starting three new Project Authorization Requests (PARs) in the field of safety for autonomous systems.

Moreover, we received recommendations on how to improve industry engagement from the CS Industry Advisory Board.

I hope that all activities described above, that we have performed in 2019 in support of women in computing will motivate more and more women to continue in their professional career in computing, and to engage with the IEEE and the CS, where their technical and personal value will certainly be respected and rightly acknowledged. I also hope that our activities to enhance diversity in age will motivate young students and professionals to join and engage with our technical community, where they could find the inspiring excellence of older technical experts, and the vibrant networking of peers, that will enable their professional and personal growth. Moreover, I hope that our activities to enhance geographic diversity will enable us to understand better the diverse needs of our members worldwide, thus allowing us to better tailor our products and service for them. This will enable us to enhance our international connotation, which is also one of our strengths to continuing in technical excellence and innovation. Finally, I hope that our activities to enhance diversity in academic/industry affiliation will enable us to increase industry engagement and cooperation, with consequent beneficial impact on the technical excellence of all our activities, and increased effectiveness of our services for the professional growth of our students and young members.

BOOST TECHNICAL EXCELLENCE

To foster the growth of the CS as a technical community of the highest quality, through which the professional growth of each member can be achieved, we started attracting highly qualified members from both academia and industry in all our Boards and Committees, thus providing a long-term and expert technical vision.

To boost technical excellence, together with the Vice President for Standards, Dr. Riccardo Mariani (Nvidia, USA), the Board of Governors, and staff, within the Member and Geographic Activities Board, we created a new Special

Technical Community (STC) on Reliable, Safe, Secure, and Time-Deterministic Intelligent Systems. This is a technical area of increasing interest among companies. This new STC has a core team consisting only of technical experts from leading industries in the field (such as Intel Corporation, Qualcomm, STMicroelectronics, ARM, Synopsys, Bombardier, and Hitachi). The new STC will also create synergy with the IEEE's Global Initiative on Ethics for Autonomous and Intelligent Systems. Everyone who has a technical interest in this specific field is welcome to join, at no fee. For more information, please visit https:// www.computer.org/communities/ special-technical-communities/ rsstdis. By gathering together industry and academic technical experts, as well as practitioners and young professionals with interest in this broad and challenging technical field, this new STC will serve as the launching constituency to respond to the industrial needs for new IEEE standards, bridging the gap among existing international standards on autonomous intelligent systems (vehicles, robots, etc.).

Additionally, to boost the collaboration with other IEEE Societies and IEEE Future Direction Initiatives on these timely technical challenges, together with the Vice President for Standards, Dr. Riccardo Mariani (Nvidia, USA), the Board of Governors, and staff, in June 2019 we proposed the creation of a new IEEE Project on Reliable, Safe, Secure, and Time-Deterministic Intelligent Systems. The proposal has been approved and sponsored for 2019 and 2020, within the IEEE Digital Reality Initiative of the IEEE Future Directions. With the help of the IEEE and CS staff, we have been able to organize the 2019 IEEE Technical Meeting on Reliable, Safe, Secure, and Time-Deterministic Intelligent Systems, which will be held in Bologna, on December 6th, 2019, with the sponsorship of the IEEE Digital Reality Initiative and the CS, and with the support of the School of Engineering of the University of Bologna, the Department of Electrical, Electronic, and

Information Engineering "Guglielmo Marconi" (DEI) of the University of Bologna, and the Department of "Computer Science and Engineering (DISI)" of the University of Bologna. The meeting will gather together industry and academic experts in the field to address the technical challenges for reliable, safe, secure, and time-deterministic intelligent systems (e.g., vehicles, robots, etc.), with a higher level of autonomy compared to existing solutions, thus enabling a smarter world. The interoperability among the techniques adopted to guarantee each one of these features individually will also be addressed, to enable their positive interaction, rather than a destructive one. At the meeting, an innovative platform defining the requirements for reliable, safe, secure, and time-deterministic intelligent systems, as well their coordination will be discussed and defined together, as the preamble to the development of new IEEE Standards in the field.

Similar to the 1st IEEE Computer Society Global Chapter Summit, this meeting will be an opportunity for the IEEE and the CS to experience new meeting formats, in this case for industry engagement and collaboration.

Additionally, this year, under the leadership of the Vice President for Publications, Prof. Fabrizio Lombardi (Northeastern University, USA), and with the significant contribution of the whole Publications Board and staff, the emphasis on quality has also been rewarded by an increase in impact factor (IF) in nearly all publications. We are also working on establishing new IEEE Transactions co-sponsored with other IEEE Societies on emerging technical challenges of mutual interest. Moreover, Best Paper awards have been initiated for all publications, where the selection of each award is managed by the Editorial Board of its publication, with the concurrence of the Vice President of Publications and the CS President for final approval.

Moreover, under the leadership of the Vice President for Standards. Dr. Riccardo

Mariani (Nvidia, USA), and with the significant contribution of the whole Standards Board and staff, three new PARs (Project Authorization Requests) to create new standards have been developed: a Standard for a Formal Model of Safe Automated Vehicle Decision Making, a Standard for Methodologies and Languages for Safety and Security Analysis, and a Standard for Automated Mobile Robots. Also a project for improved visibility and dissemination of IEEE Standards is currently under development.

Additionally, in order to keep the CS educational and professional contents up to date, under the leadership of the Vice President for Professional and Educational Activities, Dr. Kunio Uchiyama (Hitachi, Japan), and with the significant contribution of the whole Professional and Educational Activities Board and staff, this year the 2014 version of **SWEBOK started being revised**, including new timely topics, such as artificial intelligence and security.

Moreover, under the leadership of the Vice President for Member and Geographic Activities, Dr. Yervant Zorian (Synopsys, USA), and with the significant contribution of the whole Member and Geographic Activities Board and staff, this year the Member and Geographic Activities Board expanded its family of Special Technical Communities by adding the new STC mentioned before, while continuing to support the activities of the other 18 STCs, that are also open for new members to join them.

Also, under the leadership of the Vice President for Technical and Conference Activities, Prof. William Gropp (University of Illinois at Urbana-Champaign, USA), and with the significant contribution of the whole Technical and Conference Activities Board and staff, applications for new conference sponsorship and technical co-sponsorship have been evaluated to continue ensuring high quality levels across the whole CS conference portfolio.

Additionally, every year the CS contributes—through its esteemed Fellow Evaluating Committee, this year chaired by Prof. Ahmed Louri (George Washington University, USA)—to evaluating those brightest members who deserve to be elevated to the grade of IEEE Fellow. Each year, the total number of IEEE Fellows does not exceed one-tenth of one percent of the total voting IEEE members. This year, we were honored by the elevation to the IEEE Fellow grade of 49 CS members and 15 IEEE members, evaluated by the CS Fellow Evaluation Committee.

I believe that all the activities described above, which we performed in 2019 to boost technical excellence, will be effective in preserving, if not enhancing, the technical distinction of our community. A community that, throughout the years since its foundation back in 1971, has always pioneered and led the extraordinary evolution that technology has experienced, while simultaneously preserving utmost fairness and high selectivity in all activities.

FINANCIAL SUSTAINABILITY AND IMPROVEMENT

Financial sustainability and improvement has also been a major goal of my Presidential year. After so many years of financial deficit, the CS closed financially positive in 2018, under the leadership of Prof. Hironori Kasahara (Waseda University, Japan), as IEEE Computer Society 2018 President. Continuing on the positive financial slope after several years of financial deficit has been a challenge, but we have been able to make it. This thanks to the wise financial leadership of the CS Finance Committee, chaired by Prof. Dimitrios Serpanos (University of Patras, Greece), the Board of Governors, the Director of Finance, Sunny Hwang, the Executive Director. Melissa Russell. and the Associate Executive Director, Anne Marie Kelly. We have been able to close financially positive and increase our reserves significantly (also through the decision to sell one of our buildings in California), thus paving the way to a sustainable financial management of the CS and all its

members' activities for the upcoming years. Closing in a positive financial way has required strong fiscal decisions that we have been able to make with the unanimous vote of all governing bodies, and the full understanding of all involved volunteers, thanks to the transparent and clear communicative approach also to financial issues, that we have been able to implement in all activities, with the utmost transparency, throughout the year.

o conclude, it has been a very busy and prolific 2019. Several activities have been pursued and accomplished. This has been possible thanks to the strong cooperation of all CS constituencies, including the Board of Governors. Technical Committee/ Council Chairs, Editors-in-Chief, members of all Program Boards, Chapter Chairs, Chapter members, and all other wonderful volunteers and members who believed in us and helped us so much in all these endeavors, enthusiastically accepting our proposals and ideas, and helping us to make them come true. Our achievements have been made possible thanks also to the support of our outstanding staff, led by our enthusiastic and collaborative Executive Director, Melissa Russell, and Associate Executive Director, Anne Marie Kelly. Throughout the year, I have also been continuously supported by the wise and inspiring cooperation of both the CS Past President, Prof. Hironori Kasahara (Waseda University, Japan) and the CS President-Elect, Prof. Leila De Floriani (University of Maryland, USA), as well as by the prompt and timely collaboration of both the CS First Vice President, Prof. Forrest Shull (Carnegie Mellon University, USA), and the CS Second Vice President, Prof. Avi Mendelson (Technion -Israel Institute of Technology, Israel).

I am enthusiastically looking forward to starting my 2020 service as Past President of the CS, since I am quite sure that the CS will continue to improve on member satisfaction, diversity

and inclusiveness, technical excellence, and financial sustainability under the leadership of our extraordinary 2020 CS President, Prof. Leila De Floriani.

Personally, it has been the busiest year of my life, but it has also been a very, very happy year, above all for the strong collaboration and interaction with you all. Because the CS is mainly this: community, collaboration, engagement, and acknowledgement, for the professional and personal growth of each and every member. Together, we have been a great team, and I am sure that this

collaborative attitude will continue and even improve; this way, the CS will have a shining future ahead, for the satisfaction of all its members and the benefit of humanity. Thanks to all for your extraordinary contribution and support.

The CS is here to help each one of you, and needs the collaboration of each one of you. The CS is all of its members together.

Please do not hesitate to contact me with suggestions and feedback. You can reach me by email at cecilia.metra@unibo.it.

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