

The Perspective One Year Later

In this "President's Message," which is my last, I'd like to look back at a few themes that struck me most during 2014.

WHAT IS CONTROL?

Numerous definitions have been offered [1]. Mine is an expansive view, related to the use of mathematics and reasoning to enable sensors, actuators, communications, and computers to cause dynamics systems to behave in a desired fashion. Interesting aspects of our field are that control applications proceed with or without us and our contributions are often hidden from public perception. The public may not understand fundamental performance limitations and tradeoffs, but it does appreciate impacts such as that of the catalytic converter on auto emissions and air quality. Continued theoretical and technological advances allow control contributions to have an impact in increasingly diverse fields. The IEEE Control Systems Society (CSS) is participating with six IEEE Societies to establish the IEEE Life Sciences Technical Community and *IEEE Life Sciences Letters*. In addition, *IEEE Transactions on Control of Network Systems* is in its first year of publication, which will be celebrated in October at the SCONES Symposium in Boston.

INTERNATIONALIZATION

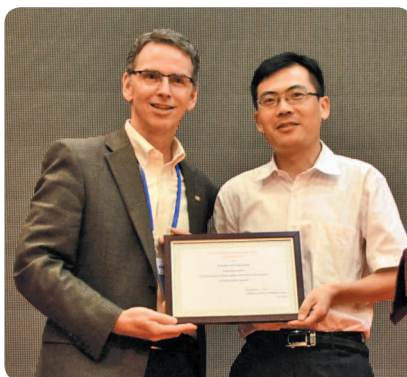
One of the most rewarding progressions that I have observed over the last decades is the success of CSS's internationalization efforts. The Multiconfer-



Jay Farrell rafting through Guilin prior to the 2014 Chinese Control and Decision Conference.

ence on Systems and Control (MSC) often takes the role of the CSS ambassador conference because its typical size allows it to sometimes be held in locations where a Conference on Decision and Control (CDC) could not.

The MSC was the first major IEEE CSS-organized conference held in Singapore (2007); St. Petersburg, Russia (2009); Dubrovnik, Croatia (2012); Hyderabad, India (2014); Nice/Antibes, France (2015); and Buenos Aires, Argentina (2016). The 2016 MSC will be



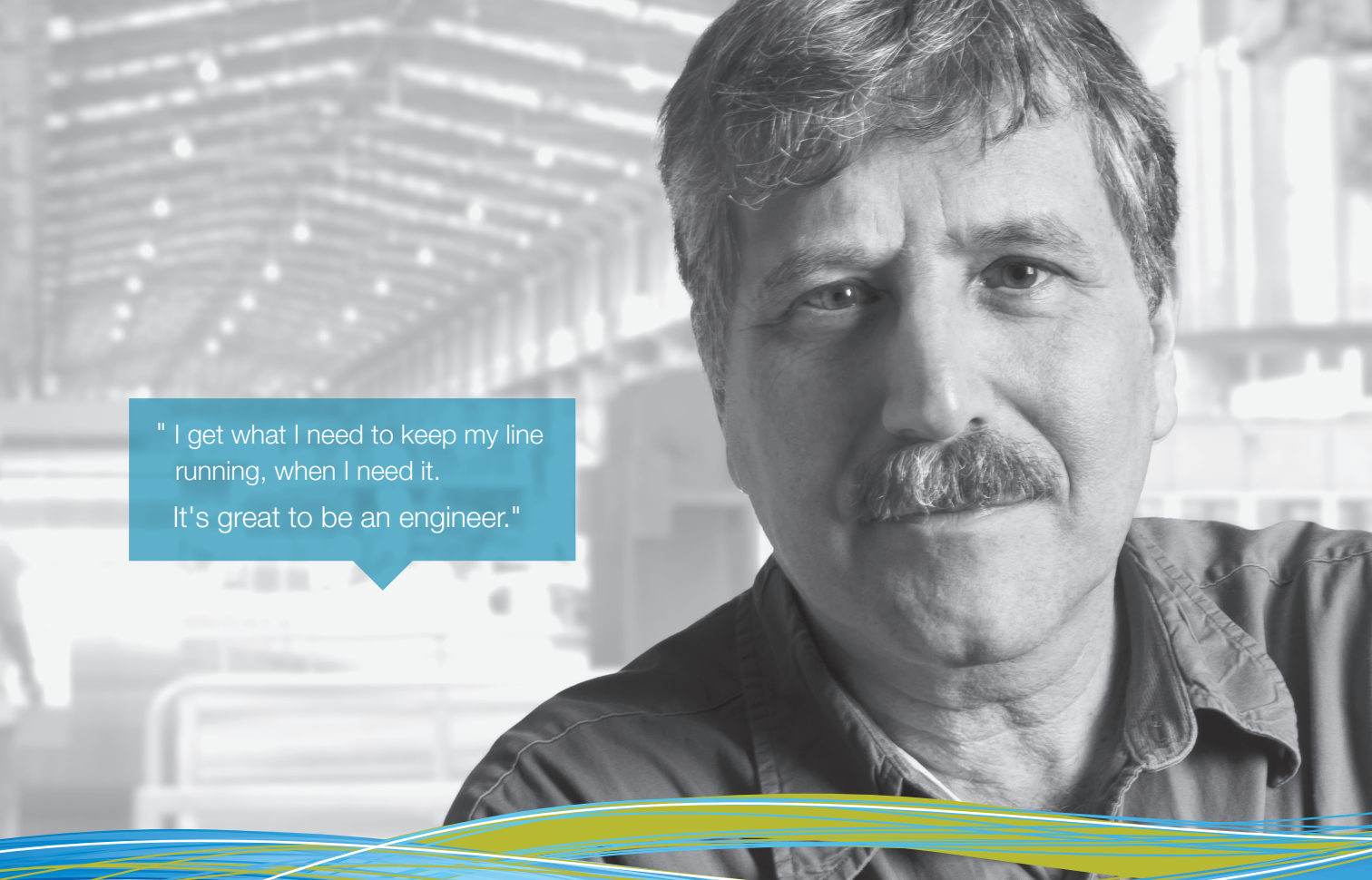
Jay Farrell presenting the IEEE CSS Beijing Chapter Young Author Prize to Prof. Gong Shen (coauthor Yongqing Wang is not shown) at the Chinese Control Conference awards banquet in Nanjing in July 2014.

the final one. MSC will be superseded by the Conference on Control Technology and Applications (CCTA) starting in 2017. The CCTA is expected to maintain the international ambassador role. In addition, the CDC is also regularly held at international venues. Finally, the extent of CSS volunteers and researchers publishing in, and reviewing for, CSS publications and conferences has expanded across the globe.

Of course, the CSS continues its efforts to increase its impact and understanding of its impact throughout the world. One such effort is its Outreach Program. Another is technical cosponsorship (TCS) of conferences, workshops, and symposia. In a typical year, IEEE CSS may approve ten TCSs and 20 TCSs with proceedings acquisition (PA). For 2013–2014, these events span ten countries including Malaysia, Austria, China, Japan, South Korea, Singapore, Tunisia, Italy, India, and the United States. When TCS with PA is approved, the publications from the event are distributed through IEEE *Xplore*.

COLLEGIAL VOLUNTEERISM

Because these messages are prepared four months in advance, I write this last message in August, 12 months after my first message about the responsibility of the president elect to fill the CSS roster with a slate of willing and able volunteers. Throughout 2014, it has been my pleasure to work with CSS volunteers as we strive to balance academic and professional service with their responsibilities to family and our desires to focus time and energy on research. I am proud to have worked with this group to keep CSS healthy and running smoothly. Since

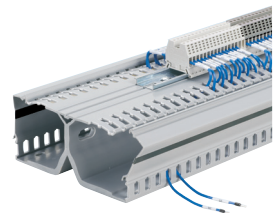


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John Baillieul guarding Pat Baillieul, Christos and Carol Cassandras, and Jay Farrell on a bush trek at the Kruger National Park, prior to the IFAC World Congress.

there are over 600 such volunteers, I cannot individually name them all. Nonetheless, please accept my sincere gratitude for your hard and collegial work for our profession.

Special thanks goes to the CSS Executive Committee, with whom I have worked very closely in 2014. Edwin Chong is completing his third year as vice president (VP) of Financial Activities. Frank Allgöwer is completing a two-year term as VP of Technical Activities. Francesco Bullo is completing a two-year term as VP of Publication Activities. Kirsten Morris is completing a two-year term as VP of Member Activities and starting a new term as VP of Technical Activities. Anu Annaswammi concludes her first year as VP of Conference Activities and will continue in that role in 2015. Each of these roles is critically important and I greatly appreciate the dedication and hard work of this group.

At the CDC in Los Angeles, I will pass the gavel of CSS leadership to Elena Valcher as president. I have great confidence in her leadership and the Society's success. I hope that she enjoys the experience as much as I have. Finally, I have relied on help and advice from numerous people, especially past presidents Yutaka Yamamoto, Christos Cassandras, Rick Middleton, Tariq Samad, and John Baillieul. Thank you all for freely giving your information, advice, and time.

FAREWELL

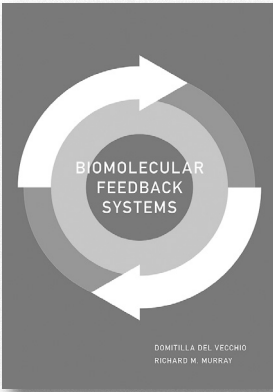
It has been my pleasure to serve as CSS president in 2014, mainly due to the collegiality and enthusiasm of the CSS volunteers. Thank you for trusting me with this privilege and responsibility. I look forward to continued research and service interactions in the future. You can continue to reach me at farrell@ece.ucr.edu.

REFERENCE

[1] T. Samad, "Applications, definitions, transitions," *IEEE Control Syst. Mag.*, vol. 29, no. 6, pp. 11–13, Dec. 2009.

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