

Volunteers Needed!

For as long as I can remember, it has been the custom of the president or president-elect of the IEEE Control Systems Society (CSS) to solicit the services of new volunteers for managing our various professional activities. In the early days, this solicitation came from the president. However, it is worth paying tribute to the management prowess of the 22nd CSS President Jim Melsa by noting that he delegated the task in 1988 to then President-Elect Jane Cullum. This change was immediately institutionalized, and the annual call for volunteers has come from the president-elect since that time. Hence, I sit here, laptop on lap, wondering whether there is anything new I can say about the need for volunteers to step forward to perform services to the profession.

Volunteers Run the Society

Perhaps I should share some information about volunteer activity in our community, which is not as widely appreciated as it should be. Most people do not realize the extent to which the IEEE is a volunteer-driven organization. All learned societies and professional organizations, whether focused on professional service (such as medicine), engineering, the sciences, or the arts and humanities, engage in a common set of activities.

These organizations hold meetings of core groups concerned with governance, they run conferences, and they publish professional and scholarly journals. What distinguishes the IEEE from peer organizations is the profound extent to which all matters of operation and governance are in the hands of the IEEE members themselves. This statement is true at all levels. Three times a year, the IEEE holds meetings of its various Institute-wide committees and boards. At last count (the November 2004 meeting series), there were more than 30 such committees and boards, many having overlapping and intertwined missions and charters. These groups are all charged with recommending policies and actions directly, or through each other, to the Board of Directors. The Board may then adopt, modify, or reject recommendations in arriving at final decisions. I occasionally think the IEEE is pathologically democratic in providing channels for input from almost every conceivable constituency, although I'm afraid a good deal of such input gets lost. I shall perhaps have more to say on this topic in the President's columns I will write for *IEEE Control Systems Magazine* next year.

Within the IEEE, the CSS carries volunteer involvement to even higher levels. We have a well-defined system of member governance, with an elected Board of Governors, that in turn elects an Executive Committee. We also manage the

operations of our own publications and conferences at a level of detail that is unknown in any of the other 38 IEEE technical Societies. Examples are many and varied. For instance, people who have submitted papers to or reviewed papers for our *IEEE Transactions on Automatic Control (TAC)* are no doubt aware of the Web-based submission and peer-review system (<http://control.bu.edu/ieee/esub.html>). This system was designed and written by *TAC* Editor-in-Chief Christos Cassandras, together with some of his graduate students. We also have a Web-based conference submission, peer-review, and publication system called PaperPlaza (<http://www.paperplaza.net>). In my opinion, this system is a technical tour de force, written and maintained by CSS volunteers, namely, Huibert Kwakernaak and Pradeep Misra. In almost all other Societies within the IEEE, such systems are provided on a fee-for-service basis by commercial vendors. And from personal experience, I can report that these systems are not generally up to the standards designed and implemented by CSS volunteers.

Where are the entry-level opportunities for volunteer service within the CSS? I assume if you are still reading at this point, you may be interested in becoming more deeply involved in volunteer service. Therefore, I shall try to answer the question of where to begin.

Reviewers Needed

No service is more important than peer review for our conferences and journals. All Society members will find that reviewing papers is an excellent way to maintain currency in the field. Moreover, by providing feedback to authors, a reviewer is actually an active participant in improving the quality of our technical literature. An excellent way to begin work as a peer reviewer is to serve as a reviewer of papers submitted to one of the Society's three major annual conferences: the American Control Conference (ACC), the Conference on Control Applications (CCA), or the Conference on Decision and Control (CDC). If this role is of interest, please contact the chair of the Conference Editorial Board (CEB):

Prof. Thomas Parisini (parisini@univ.trieste.it)
Dept. of Electrical, Electronic, and Computer
Engineering (DEEI)
University of Trieste
Via Valerio 10 34127
Trieste, Italy

Include your contact information, three to six keywords indicating your areas of expertise relevant to the review process, and a brief description of your technical training and professional background.

Reviewers are also needed for the Society's three major publications, *TAC*, which emphasizes the underlying mathematics and conceptual foundations of control systems, *IEEE Transactions on Control Systems Technology*, which emphasizes the technology of control systems, and *IEEE Control Systems Magazine*, which publishes informative articles and columns on all aspects of control system technology for the benefit of educators, practitioners, and researchers. A manuscript submitted to any of these publications is sent to three or more reviewers who possess special knowledge in the relevant subject area. The reviewers have approximately four weeks to evaluate the manuscript and make a recommendation. In arriving at a recommendation, the reviewer evaluates the technical

content of the manuscript as well as the adequacy of the presentation, including the abstract, introduction, organization, figures, and references. Perhaps the most important input the reviewer provides comes in the form of written comments that might help the authors improve the manuscript. These comments are forwarded anonymously to the authors by the editor or associate editor handling the paper.

If you wish to volunteer as a reviewer for one of the three CSS publications, please contact the appropriate editor-in-chief using the contact information available in the publication or on the CSS Web site. Again, include your contact information, a short description of your areas of expertise relevant to the review process, and a brief description of your professional background. Past experience as a reviewer is a big plus, and if you are just starting out in the peer review system, you might want to look into conference reviewing first. For further information, you may contact the vice president for Publication Activities:

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Constitution Change

A petition to change the IEEE Control Systems Society Constitution was approved by IEEE Technical Activities Board (November 2004) and IEEE Control Systems Society Board of Governors (June 2004).

Bold=to be inserted

~~Strike out~~=to be deleted

Article V—Management and Officers

Section 3. The Executive Officers of the Society shall be: President, President Elect, Vice President for Technical Activities, Vice President for Financial Activities, Vice President for Member Activities, Vice President for Publication Activities, Vice President for Conference Activities, the immediate Past-President and Secretary-Administrator. The Board of Governors shall annually elect the President-Elect and each of the Vice Presidents for one-year terms of office beginning January 1st of the year following their election. The President-Elect shall become President of the Society on January 1st of the second year following election to that office. The President may not serve two consecutive terms. ~~No Vice President shall serve in one office for more than two consecutive terms.~~ **The normal period of service in one Vice-President office is two consecutive terms. No Vice-President shall serve in one office for more than three consecutive terms.** No officer shall hold two offices of the Society simultaneously. The President-Elect and the Vice Presidents, at the time of their election to office, shall be serving a current term as Vice President, or shall be elected members of the Board of Governors, or shall have served as elected members of the board of Governors not more than ~~three~~ **six** years prior to the date of their election.

Join a Technical Committee

You can also join one of the many technical committees of the CSS. These committees facilitate information exchange and promote areas of special interest within the larger field of control engineering. Technical committees engage in a number of important activities:

- publish a (possibly Web-based) newsletter
- create/maintain a Web site dealing with the focus area of the Technical Committee
- organize workshops or invited sessions at annual conferences such as the ACC, CCA, and CDC.

If you are interested in participating in the activities of one of our technical committees, please contact either the Technical Committee chair or the vice president for Technical Activities:

Prof. Yutaka Yamamoto (yy@i.kyoto-u.ac.jp)
 Department of Applied Analysis and Complex
 Dynamical Systems
 Graduate School of Informatics
 Kyoto University
 Kyoto 606-8501, Japan
 Tel: +81 75 753 5901
 Fax: +81 75 753 5517

You should provide the Technical Committee chair or Prof. Yamamoto with your contact information, the names of the technical committees that interest you, and a brief description of your professional background and current activities.

Run a Conference

There are also many opportunities to help in running one of the 20 conferences, symposia, and workshops (listed on the CSS Web site) that CSS either sponsors or cosponsors each year. Conferences are an increasingly important medium for rapid communication of cutting-edge technical information. Not only do conference organizers provide a great service to their profession, they also expose themselves to the latest in new technical developments in the field. Volunteer service can include managing local arrangements, publications, registration, or finances. You might also serve on a program committee and help design the technical program of the conference. Other ways to contribute technically include organizing conference sessions and workshops and serving as a session chair. For more information on conferences, please contact the general chair of a specific conference event as listed on the conference pages of the Society Web site, or contact the vice president for Conference Activities:

Theodore Djaferis (djaferis@ecs.umass.edu)
Department of Electrical and Computer Engineering
University of Massachusetts
Amherst, MA 01003-4410 USA

Membership Is Vital

Finally, I should mention member activities as an area where volunteer service is needed. First and foremost, if you are not yet a member, please join the CSS. If you would like to help enlarge our community or find ways that the CSS can better serve its members, please contact the vice president for Membership Activities:

Richard H. Middleton, (rick@ee.newcastle.edu.au)
Centre for Integrated Dynamics and Control

The University of Newcastle
2308 Australia

Rick will have specific suggestions, including activities to recruit new members, especially students and under-represented members of the population. He will also have ideas about addressing the needs of constituent groups, including students, retirees, women, and international members.

Additional Opportunities

Beyond the activities that lie within the portfolios of the aforementioned vice presidents of the Society, there are a number of other volunteer positions, including membership in ad hoc and standing committees, external committee and liaison positions, conference committees, and editorial boards. Most of these positions are listed on the CSS Web site. If any of the positions is of interest, please contact me at the address below.

It is a great honor for me to have been chosen by my peers to serve as president-elect. It is a wonderful way for me to continue the service that has been a big part of my professional life over the past several decades. The CSS is now slightly more than 50 years old. The past half-century has been a remarkable period of accomplishment for our field, and the CSS has played a significant role in the advances that have occurred. I invite you to join me in performing the crucially important volunteer services that will support even greater successes in the next half-century.

—**John Baillieul** (johnb@bu.edu)
CSS President-Elect, 2005

Ph.D. DISSERTATIONS

Send dissertations in the format shown to:

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“On Output Static Feedback in Linear Time-Invariant Finite-Dimensional Systems”

Federico Najson

University of California at Los Angeles, Mechanical and Aerospace Engineering Department, USA

Date: August 2003

Supervisor: Jason L. Speyer

Current Address: Mechanical and Aerospace Engineering Department, University of California at Irvine, 4200 Engineering Gateway, Irvine, CA 92697-3975 USA; fnajson@ucla.edu

“Intelligent Model Structures in Visual Servoing”

Marco Antonio Perez-Cisneros

University of Manchester, Control Systems Centre, UK

Date: October 2004

Supervisor: Peter A. Cook

Current Address: Electronics and Computer Science Division, University of Guadalajara, Blvd. Marcelino Garcia Barragn y Calzada Olimpica #1421, Guadalajara, Jalisco, MEXICO 44430; marcopc@ieee.org.