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TRANSITION
Iakov Z. Tsypkin
1919 – 1997

Real Time Programming
22nd IFAC / IFIP Workshop
Lyon, France, 15 – 17 September 1997

Each paper was reviewed by at least four referees (in some cases, there were five reviewers), who gave marks. The highest scoring 21 papers were selected for acceptance and assigned to presentation in seven different sessions. Of these 21 papers accepted for publication, 20 were for an university-based and 1 from a research agency. There were 2 no-show papers.

Brief Summary of Programme and Discussion
The event's primary focus was on software development and methodologies appropriate for real time systems. The seven sessions addressed the subject areas:

- Architecture and Systems (2 sessions)
- Design and Applications
- Object Oriented Approach (2 sessions)
- Timing Analysis and Scheduling (2 sessions)

This year, a particular accent was on object-oriented research in the field of real time programming. Thus, the program was shaped in such a way that two sessions on Object-Oriented Approaches were placed the second day. At the closing of this day, a forum was organized as an intentionally challenging/controversial discussion. It was devoted to the Object-Oriented Real Time Systems. After short statements by the panelists, an interesting discussion took place among all the participants in the workshop. A second forum devoted to real-time education took place the third day and was organized in the same manner and with the same aim: to obtain an outstanding discussion among all the participants in the workshop. This feature of introducing two forums was quite successful.

Numerous discussions took place in each of seven sessions, two forums, and during the breaks (the conference breaks twice a day, and the 2-hour lunch break). In addition, the Workshop devoted ample time for focused discussions by inviting two keynote speakers: from the Industry World, to give talks on interesting topics:

- M. Philippe Hilsenkopf (France), Engineer, Expert of Framatome Group, Instrumentation and Control Department, gave an invited talk on Nuclear Power Plant I&C and Dependability Issue;
- Dr Eric Rentier (from IRISA / INRIA, France) presented a keynote speech on the SACRES ESPRIT approach to embedded systems applied to aircraft engines (project done in collaboration with SNECMA Industry and TNI).

Mathieu Maranzana, Jacques Skubic
WRPT'97 Editor, IPC Chairman
Change of Editor-in-Chief:
CONTROL ENGINEERING PRACTICE

As the first Editor-in-Chief of CEP, in 1992 I faced a huge challenge set by IFAC's Council to select the best of the applications material available to the Federation from its array of international events, and transform this into a viable, professional journal. More than just an archival publication, the journal had also to be attractive and useful to industrialists, academics and other researchers in the application of control engineering. Clearly, an extensive team would be required, and it was gratifying that within weeks we had more than enough offers of help. Contrary to my expectations, many of these came from industry; throughout these formative years almost half the Editors, Associate Editors and Reviewers have been industrially based.

Through the wonderful efforts of these people, in soliciting, generating and reviewing papers, there is no doubt that we have succeeded. This success has been especially notable in a climate in which the publishing industry is facing serious new challenges.

These first six years, however, have just seen the start of CEP, and much still remains to be done. In the light of both past successes and the many and varied future challenges, the Editorial Board of CEP has undertaken an extensive review of where we are going, and how we are going to get there. The questions to be answered include:

- With the increase in the number of IFAC Affiliated Journals, and the increasing breadth of CEP, is our scope still valid?
- As the page count is limited by economic realities, much valuable material still has to be omitted. What do we do about this?
- The market is becoming increasingly wary of duplicate publications - is the often-encountered "re-cycling" of conference papers really acceptable?
- We are receiving an increasing number of directly submitted papers. What should the balance be between such papers and those derived directly from IFAC events?
- How do we distribute the editorial and review work - given the worldwide phenomenon that, in all sectors of employment, more is being expected of less?
- Finally, how do we respond to the electronic publishing era - where engineers and scientists increasingly expect material to be delivered directly to their desks?

To respond to these many challenges, and implement the strategy envisioned by our Editorial Board, I have firmly believed for some time that we were reaching the point where fresh leadership of CEP was becoming necessary. In addition to this, we need to find new ways of producing and managing the journal.

The first step in this process has come with the introduction of a new person with experience of the IFAC situation from the mid-1990s; we believe that CEP's growing status as an archival journal merits the best presentation possible! Working from authors' disks, Elsevier will engineer Practice, Prof. Irwin serves on the International Editorial Board of the IFAC Proceedings on Control Theory and Applications and has wide experience on the programme and organising committees of international conferences. He is also active in two IFAC Technical Committees, ‘Algorithms and Architectures for Real-time Control’ and ‘Fuzzy and Neural Systems’ and is an executive committee member of the UK Automatic Control Council.

In addition to being Editor-in-Chief of Control Engineering Practice, Prof. Irwin serves on the International Editorial Board of the IEEE Proceedings on Control Theory and Applications and has wide experience on the programme and organising committees of international conferences. He is also active in two IFAC Technical Committees, 'Algorithms and Architectures for Real-time Control' and 'Fuzzy and Neural Systems' and is an executive committee member of the UK Automatic Control Council.

This Newsletter may be reproduced in whole or in part. We encourage reprinting in national and local automatic control periodicals.

Acknowledgement to IFAC would be appreciated.

* Newsletter Editor’s Note: Due to the changes in the publications process for Control Engineering Practice, the previews for issues 1 & 2 cannot be published in this issue of the IFAC Newsletter.

WHO IS WHO IN IFAC

Professor George Irwin
Editor-in-Chief
Control Engineering Practice

George Irwin has a 1st class honours degree in Electrical & Electronic Engineering (1972) and a PhD in Control Theory (1976) from The Queen's University of Belfast, Northern Ireland. Returning to Queen's in 1980, he was awarded a personal chair in Control Engineering in 1989.

Current research interests, much of which is in collaboration with industry, include identification and control using neural networks, fuzzy neural systems and local model networks, with applications in the aerospace, chemical and electric power fields. He has over 200 publications, including 6 edited research books. Prizes awarded for journal papers include four IEE Premiums (1985, 1987, 1991, 1996) and the 1995 Honeywell Prize from the UK Institute of Measurement and Control (1995). He is a member of the Control & Instrumentation College of the UK Engineering & Physical Sciences Research Council.

Prof. Irwin is the current chair of the new IEE Control division and chairs the Northern Ireland Centre of the IEEE. He is a Chartered Engineer, a Fellow of the IEE, a Senior Member of the IEEE and a Fellow of the Institute of Measurement and Control.

To respond to these many challenges, and implement the strategy envisioned by our Editorial Board, I have firmly believed for some time that we were reaching the point where fresh leadership of CEP was becoming necessary. In addition to this, we need to find new ways of producing and managing the journal.

The first step in this process has come with the introduction of a new person with experience of the IFAC situation from the mid-1990s; we believe that CEP's growing status as an archival journal merits the best presentation possible! Working from authors' disks, Elsevier will engineer Practice, Prof. Irwin serves on the International Editorial Board of the IEEE Proceedings on Control Theory and Applications and has wide experience on the programme and organising committees of international conferences. He is also active in two IFAC Technical Committees, 'Algorithms and Architectures for Real-time Control' and 'Fuzzy and Neural Systems' and is an executive committee member of the UK Automatic Control Council.

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<th>Title</th>
<th>Date</th>
<th>Place</th>
<th>Deadline</th>
<th>Further Information</th>
</tr>
</thead>
</table>
| IFAC Workshop | Feb. 27 - March 2 | Mohican State, Park, USA | - | Prof. Giorgio Rizzoni  
The Ohio State University, Dept. of Mech. Engg.  
206 West 18th Avenue, Columbus, OH 43110-1177, USA  
FAX: +1/614/292 3163  
e-mail: rizzoni.1@osu.edu |
| IFAC Workshop | March 23 - 24 | Sevilla, Spain | - | ICV '98 Secretariat, Dpto Ingenieria de Sistemas  
Escuela Superior de Ingenieros  
Avda. Reina Mercedes  
E-41012 Sevilla, Spain  
FAX: +34/5/455 6849  
e-mail: icv98@cartuja.us.es  
http://www.esi.us.es/ISAI/cicv98 |
| IFAC Symposium | March 25 - 27 | Madrid, Spain | - | IAV '98 Secretariat  
Universidad Carlos III de Madrid  
Depo de Ingenieria, C/Butarque 15  
E-28911 Leganes, Madrid, Spain  
FAX: +34/62/49430  
e-mail: iav98@ing.uc3m.es  
http://www.uc3m.es/iaav98 |
| IFAC Workshop 5th | April 15 - 17 | Cancun, Mexico | - | AARTC Workshop Secretariat  
Attn. Dr. Pedro Acevedo Contla  
IMAS-UNAM, Apdo Postal 20 726  
C.P. 01000 Mexico, D.F., Mexico  
FAX: 52/54/16 0176  
e-mail: workshop@aartc98.org.mx  
http://www.aartc98.org.mx |
| IFAC/CIGR Workshop | April 24-26 | Makuhari, Japan | - | Prof. Y. Hashimoto  
Dept. of Biomechanical Systems, Ehime Univ.  
Tarumi, Matsuyama 790, Japan  
FAX: +81/8/947 8748  
e-mail: hashimoto@agr.ehime-u.ac.jp |
| IFAC Conference | May 14-16 | Bucharest, Romania | - | Control and Computer Faculty - SWISS 98  
Politechnical University of Bucharest  
Splaiul Independenstei, Nr. 313  
R-77206 Bucharest, Romania  
FAX: +40/1/311 3242  
e-mail: swais@lnx.ics.pub.ro  
http://info.tuwien.ac.at/IIHT/swiss_tech/ |
| IFAC Workshop | May 21 - 23 | Bled, Slovenia | - | LASIM, Fac. of Mechanical Engg., Askerceva 6  
SLO-1000 Ljubljana, Slovenia  
FAX: +386/61/218567  
e-mail: dragica noe@fs.uni-lj.si |
| IFAC/EPB/SFBJ Conference | May 31 - June 4 | Osaka, Japan | - | Prof. Suteaki Shioya  
Dept. of Biotechnology  
Graduate School of Engineering  
Osaka University, 2-1 Yamada-oka  
Suita, Osaka 565, Japan  
FAX: +81/6/879 7444  
e-mail: shioya@process.bio.eng.osaka-u.ac.jp |
| IFAC Workshop | June 3 - 5 | Budapest, Hungary | - | Prof. I. Farkas  
Dept. of Physics and Process Control  
University of Agriculture  
Pater K.u. 1, H-2103 Gdendölt, Hungary  
FAX: +36/28/310804  
e-mail: farkas@eng.gau.hhu |
| IFAC Workshop | June 4 - 5 | Solaize, France | - | Dr. Silvie Cauvin, Institut Francais du Pétrole  
1-4 avenue de Bois Prés  
F-02852 Rueil Malmaison Cedex, France  
FAX: +33/1/47527022  
e-mail: Sylvie.Cauvin@ifp.fr |
| IFAC Symposium | June 6 - 10 | Corfu, Greece | - | Prof. Costas Kiparissides  
Dept. of Chemical Engineering  
 Aristotle University of Thessaloniki, POB 472  
GR-54006 Thessaloniki, Greece  
FAX: +30/31/596198  
e-mail: dycop98@alexandros.cperi.orth.gr  
http://lpr1.cperi.orth.gr/~dycop98/|
| IFAC/CIGR Workshop | June 14 - 17 | Athens, Greece | - | Prof. Nick Sigrimis  
Lab. of Automation in Agriculture  
Iera odos 75, GR-11855 Athens, Greece  
FAX: +30/1/529 4039  
e-mail: sigrimis@computer.org |
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<th>Title</th>
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<th>Deadline</th>
<th>Further Information</th>
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| IFAC Workshop                                  | Chelyabinsk | 15 Jan. 1998 | Prof. V. Batukhtin, Chelyabinsk State University  
Kashirinyykh 129  
4564136 Bratiev, Chelyabinsk, Russia  
FAX: +372/320859  
e-mail: batu@cgw.chel.su |
| Nonsmooth and Discontinuous Problems           | Russia    |          |                                                          |
| of Control Optimization and Applications       |           |          |                                                          |
| IMACS/IFAC/IFIP Symposium                      | Athens    | 1 March 1998 | Prof. S. G. Trafostas, SOFTCOM 98  
IRAL, Inst. of Communication & Comp. Sc.  
Nat. Technical Univ. of Athens  
GR-15773 Zografou, Athens, Greece  
FAX: +30/1/1772 490  
e-mail: dicositis@robotics.ece.ntua.gr |
| Soft Computing in Engineering Applications     | Greece    |          |                                                          |
| IFAC Workshop (229)                            | Shantou   | 15 Jan. 1998 | Gong Shishan, Computer Science Dept.,  
Shantou University, 315063 Shantou, Guangdong  
China, P.R.  
FAX: +86/754/2510654  
e-mail: lczhang@maiserv.stu.edu.cn |
| Real Time Programming                          | China     |          |                                                          |
| IFAC Symposium                                 | Nancy     |          |                                                          |
| Information Control Problems                   | France    |          | INCOM '98 CRAN-GSIP, Faculté des Sciences  
Université Henri Poincaré Nancy I, BP 239  
F-54506 Vandoeuvre les Nancy, France  
FAX: +33/83/91 21 26  
e-mail: incomm98@cran.u-nancy.fr  
http://www.gsip.cran.u-nancy.fr/incom98.html |
| in Manufacturing - INCOM '98                  |           |          |                                                          |
Northwestern Univ, 2145 Sheridan Rd.  
Evanston, IL 60208-3118, USA  
FAX: +1/708/491 4455  
e-mail: ahaddad@ece.nwu.edu  
http://www.ece.nwu.edu/~ahaddad/aacc |
| (in cooperation with IFAC)                     | PA, USA   |          |                                                          |
| IFAC Symposium                                 | Cambridge | 15 Jan. 1998 | Dr. Sean Holly, Dept. of Applied Economics  
University of Cambridge, Sedgwick Avenue  
Cambridge CB3 9DE, UK  
FAX: +44/1223/335475  
e-mail: sean.holly@econ.cam.ac.uk |
| Computation in Economics, July 1               | UK        |          |                                                          |
| Finance and Engineering                        |           |          |                                                          |
| Economic Systems                               |           |          |                                                          |
| IFAC Symposium                                 | Enschede  |          |                                                          |
| Nonlinear Control Systems Design               | NL        |          | NOLCOS 98 Secret. c/o C.H.G. Hassing-Asinik  
University of Twente, Dept. of Appl. Mathem.  
P0B 217, NL-7500 AE Enschede, Netherlands  
FAX: +31/53/493 3114  
e-mail: nolcos@math.twente.nl  
http://www.et.tudelft.nl/~schepen/nolcos.html |
| July                                           |           |          |                                                          |
| NOLCOS '98                                    |           |          |                                                          |
| Int'l. IEEE/INRIA/IFAC Conference              | Amiens    | 2 March 1998 | Prof. A. Rachid, Univ. de Picardie Jules Verne  
Lab. des Syst. Autom., 7 rue du Moulin Neuf  
P-80 000 Amiens, France  
FAX: +33/3/22 82 76 82 |
| Advances in Vehicle Controls & Safety AVCS      | France    |          |                                                          |
| IFAC Workshop                                  | Grenoble  |          |                                                          |
| Linear Time Delay Systems                      | France    |          |                                                          |
| FOS Workshop                                   |           |          |                                                          |
| Linear Time Delay Systems                      |           |          |                                                          |
| ISDG/IFAC 8th Intl. Symposium                  | Maastricht | 2 January 1998 | Prof. O.J. Vrieze, University of Limburg  
Dept. of Mathematics, POB 615  
NL-6200 Maastricht, Netherlands  
FAX: +31/43/31 1889  
e-mail: dynamic@math.unimaas.nl  
http://www.unimaas.nl/sig/ismd/ |
| Dynamic Games and Applications                 | Netherlands |          |                                                          |
| IFAC Conference                                | Nantes    |          |                                                          |
| System Structure and Control                   | France    |          |                                                          |
| IFAC/IMACS/IFIP Symposium                      | Patras    |          |                                                          |
| Large Scale Systems: Theory and Applications   | Greece    |          | IFAC-LS98  
El. & Computer Engg. Dept.  
Lab. for Automation & Robotics  
University of Patras  
GR-26500 Rion Patras, Greece  
FAX: +30/61/397 309  
e-mail: grouppos@ee.upatras.gr  
http://www.tar.ee.upatras.gr/ls98.html |
| July                                           |           |          |                                                          |
| IFAC Symposium                                 | Seoul      |          |                                                          |
| Automatic Control in Aerospace                 | Korea     |          | The Secretariat 14th IFAC/Aero  
Automatic Control Res. Centre  
Kyung Hee National University  
San 56-1, Shinm-Dong, Kwanak-Ku  
Seoul 151-742 Korea  
FAX: +82/2875 1585  
e-mail: ifac98aero@asri.snu.ac.kr  
http://asri.snu.ac.kr/~ifac98aero |
| August                                         |           |          |                                                          |
| IFAC Workshop                                  | Glasgow   | 20 January 1998 | Prof. M.J. Grimble, Industrial Control Centre  
Dept. of E&E Engg., Univ. of Strathclyde  
50 George Street, Glasgow G1 1XG, UK  
FAX: +44/141/548 4203  
e-mail: acep98@ee.strath.ac.uk  
http://www.ice.strath.ac.uk/events/adaptive.htm |
<p>| Adaptive Control and Signal Processing         | UK        |          |                                                          |
| August                                         |           |          |                                                          |</p>
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<tr>
<th>Title</th>
<th>1998</th>
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<th>Deadline</th>
<th>Further Information</th>
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<tbody>
<tr>
<td>IFAC Symposium/Automation in Mining, Mineral and Metal Processing - MMM 98</td>
<td>Sept.</td>
<td>Düsseldorf, Germany</td>
<td>-</td>
<td>VDI-VDE GMA, POB 10 11 30 D-40002 Düsseldorf, Germany FAX: +49/211/6214-161 e-mail: <a href="mailto:vdi@gma.de">vdi@gma.de</a></td>
</tr>
<tr>
<td>7th IEEE/IFAC Conference Control Applications</td>
<td>Sept.</td>
<td>Triest, Italy</td>
<td>-</td>
<td>Prof. Frank L. Lewis Automation and Robotics Res. Inst. The University of Texas at Arlington 7300 Jack Newell Blvd. S Fort Worth, TX 76118, USA FAX: +1/817/272 9843 e-mail: <a href="mailto:flewis@controls.uta.edu">flewis@controls.uta.edu</a></td>
</tr>
<tr>
<td>IFAC Symposium Low Cost Automation LCA 98</td>
<td>Sept.</td>
<td>Shenyang, China, PR</td>
<td>-</td>
<td>Prof. Chen Zhen-Yu, LCA 98 Secr., POB 919 Beijing 100071, China, P.R. FAX: +86/10/63816990</td>
</tr>
<tr>
<td>IFAC Workshop Distributed Computer Control Systems - DCCS '98</td>
<td>Sept.</td>
<td>Como, Italy</td>
<td>10 March 1998</td>
<td>Prof. Flavio DePaoli Dip. di Scienze Informazione, Via Comelico 39 I-20153 Milano, Italy FAX: +39/2/55006-373 e-mail: <a href="mailto:DCCS98@dai.unimi.it">DCCS98@dai.unimi.it</a> <a href="http://www.dai.unimi.it/dccs98">http://www.dai.unimi.it/dccs98</a></td>
</tr>
<tr>
<td>IFAC/IFIP/IFORS Symposium Analysis, Design and Evaluation of Man-Machine Systems MMS '98</td>
<td>Sept.</td>
<td>Kyoto, Japan</td>
<td>16-18 April 1998</td>
<td>Prof. Hiroshi Tanaka Kyoto Institute of Technology Matsugasaki, Sakyo-ku, Kyoto 606, Japan FAX: +81/75/701 7211 e-mail: <a href="mailto:tanura@hisl.dji.kit.ac.jp">tanura@hisl.dji.kit.ac.jp</a></td>
</tr>
<tr>
<td>IFAC Workshop Motion Control</td>
<td>Sept.</td>
<td>Grenoble, France</td>
<td>-</td>
<td>Prof. Luc Dugard, Lab. d’Autom. de Grenoble ENSIEG, BP 46 F-38402 St. Martin d’Heres-Cedex, France FAX: +33/4/76 82 63889 e-mail: <a href="mailto:dugard@lag.ensieg.fr">dugard@lag.ensieg.fr</a></td>
</tr>
<tr>
<td>ICSC/IFAC Intl. Symposium Neural Computation - NC 98</td>
<td>Sept.</td>
<td>Vienna, Austria</td>
<td>31 January 1998</td>
<td>ICSC Canada, POB 279, Millet Alberta T0C 1Z0, Canada FAX: +1/403/387 4329 e-mail: <a href="mailto:icsc@compussart.ab.ca">icsc@compussart.ab.ca</a> or: <a href="mailto:Michael.Heiss@Siemens.at">Michael.Heiss@Siemens.at</a> <a href="http://www.compussart.ab.ca/icsc">http://www.compussart.ab.ca/icsc</a></td>
</tr>
<tr>
<td>IFAC/IFIP/IFORS Workshop Telematics: A New Dimension of Automation</td>
<td>Sept.</td>
<td>Vienna, Austria</td>
<td>31 March 1998</td>
<td>Dr. R. Genser, Technical University Vienna,E13/18 Floraagasse 7a, A-1040 Vienna, Austria FAX: +43/224 154 18 399</td>
</tr>
<tr>
<td>IFAC Symposium Artificial Intelligence in Real Time Control</td>
<td>October</td>
<td>Grand Canyon, AZ, USA</td>
<td>5-8</td>
<td>Dr. Steven R. Leclair Materials Process Design Branch USA Air Force Materials Directorate Wright Laboratory, Wright Patterson AFB OH 45433, USA FAX: +1/937/665 7995 e-mail: <a href="mailto:leclair@ml.wpafb.af.mil">leclair@ml.wpafb.af.mil</a> <a href="http://sys36174.ml.wpafb.af.mil/arts98/arts98.html">http://sys36174.ml.wpafb.af.mil/arts98/arts98.html</a></td>
</tr>
<tr>
<td>IFAC Workshop Space Robotics - SPRQ '98</td>
<td>October</td>
<td>Montreal, Canada</td>
<td>15 January 1998</td>
<td>Prof. J. O’Shea, SPRQ ‘98, Ecole Polytechnique C.P. 6079, SUCC. Centre-ville Montreal, Que., H3C 3A7, Canada FAX: +1/514/340 4174 e-mail: o'<a href="mailto:shea@auto.polymtl.ca">shea@auto.polymtl.ca</a></td>
</tr>
<tr>
<td>IFAC Workshop Control Applications in Marine Systems - CAMS '98</td>
<td>October</td>
<td>Fukuoka, Japan</td>
<td>27-30 February 1998</td>
<td>Prof. K. Kijima Kyushu University, Dept. of Naval Architecture Higashi-ku, Fukuoka 812, Japan FAX: +81/92/632 1560</td>
</tr>
<tr>
<td>IFAC Workshop Intelligent Manufacturing Systems</td>
<td>November</td>
<td>Gramado, Brazil</td>
<td>1 November 1998</td>
<td>Prof. Carlos E. Pereira Rua Siqueira Campos 341/304, CEP 92010 - 230 Canoas RS, Brazil FAX: +55/41/316 3129 e-mail: <a href="mailto:cpeireira@inee.ufrgs.br">cpeireira@inee.ufrgs.br</a> <a href="http://www.inee.ufrgs.br/inee.ceepart.htm">http://www.inee.ufrgs.br/inee.ceepart.htm</a></td>
</tr>
<tr>
<td>VIII Latin American Congress on Automatic Control</td>
<td>November</td>
<td>Viña del Mar, Chile</td>
<td>9-13</td>
<td>Prof. Gastón Lefranc H., Escuela de Ing. Electrica U. Catolica de Valparaiso Casilla 6056, Valparaiso, Chile FAX: +56/2/273804 e-mail: <a href="mailto:glfranc@ax1.ucv.cl">glfranc@ax1.ucv.cl</a> <a href="http://gavilan.die.uchile.cl/~molares/ACCA">http://gavilan.die.uchile.cl/~molares/ACCA</a></td>
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Call for Papers
Special Issue on Control Methods for Communication Networks

One of the most dramatic technological developments of our times is the deployment of communication networks such as the Internet and local area networks. This networking revolution is ongoing, and continues to raise fundamental challenges for control and communication engineers.

The control problems raised require new techniques and formulations, in addition to the traditional ones familiar to control theorists. Communication networks are large complex entities which support many agents and have to handle demands with a wide range of quality of service (QoS) requirements. Together with the commercial nature of the offered services, this complexity brings to the fore problems of a game theoretic nature among the interacting agents, problems of how to price the services, of how to decide when to admit connections, and more generally how to provide and meet QoS guarantees through network management, congestion control, and flow control. The infrastructure of the network needs to be properly designed, and requires the investigation of the tradeoff between hardware cost and performance in switches and routers, the development of efficient scheduling algorithms, and the design of adaptive control methods that use appropriate distributed measurements of the current state of the network. Multiple access problems need to be solved for both wired and wireless systems.

The purpose of this special issue of Automatica is to bring together research and/or tutorial papers addressing the general theme of "Control Methods for Communication Networks," Subject areas of interest include:

- Applications of game theory and Markov decision theory to communication network problems
- Admission control, flow control, and congestion control
- Power control and mobility management of wireless networks
- Control for data compression
- Scheduling of switches
- Measurement-based control
- Control problems for satellite communications
- Pricing of network services.

Papers on other control problems in communication networks not covered by the preceding list are also welcome. All submitted papers will be subject to peer review as any other Automatica paper.

The timetable for the special issue is as follows:

Submission deadline: June 30, 1998
Expected publication date: December 1999

The special issue will be prepared by a team consisting of two guest editors, Venkat Anantharam and Jean Walrand (University of California, Berkeley) and Automatica Deputy Editor-in-Chief Tamar Basar (University of Illinois).

Prospective authors are invited to submit seven (7) copies of their papers prepared as per regular Automatica guidelines to:

V. Anantharam/J. Walrand, EECS Department
231 Cory Hall, University of California
Berkeley, CA 94720, USA
Phone:+1(510)643-8435 (VA); +1(510)642-1529 (JW)
Fax: +1(510)643-6759 (VA)
Email: ananth@eecs.berkeley.edu (VA), wlr@eclair.eecs.berkeley.edu (JW)

New IFAC Journal
Annual Reviews in Control

Dear Reader,

Elsevier Science has decided to convert its previous title Annual Reviews in Automatic Programming to Annual Reviews in Control.

Under the new title, this publication will contain a broad range of review articles, covering all aspects of the theory and application of control. The majority of these articles will be drawn from the most recent symposia, conferences and workshops of IFAC, the International Federation of Automatic Control. Those meetings cover every aspect of automatic control and feature review papers written by the most outstanding experts of the particular field. We feel that we are providing a useful service to the scientific community, and produce a valuable publication, by printing a selection of these review papers. In addition, we plan to invite experts to write review papers, directly for the journal, on subjects not sufficiently represented in the conference materials.

Converting to the new arrangements has caused some delay in the publication of the 1996 and 1997 volumes. From 1998 on, there will be one issue each year, appearing in May.

Janos Gertler, Editor
Fairfax, VA USA

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lich-rechtlichen Verein angemeldet. Sie verfolgt weder wirt-
schaftliche noch politische Ziele.

Das Sekretariat der IFAC befindet sich seit 1978 aufgrund eines Übereinkommens mit der österrei-

cischen Bundesregierung (gemeinsam mit der österrei-

cischen Akademie der Wissenschaften) in Luxemburg.

Der "IFAC Newsletter" erscheint sechs-

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Präsident der IFAC für 1996/97 ist Prof. Yong-Zai Li (VR China), Vizepräsidenten sind Prof. Vladimir Kucera (CZ) und Prof. Rolf Isenburg (D). Alle Funktionen werden ehrenamtlich ausgeübt.

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