IEEE Computer Society

Hironori Kasahara, Ph.D., IEEE Fellow: IEEE Computer Society President 2018



URL: http://www.kasahara.cs.waseda.ac.jp/

1980 BS, 82 MS, 85 Ph.D., Dept. EE, Waseda Univ. 1985 Visiting Scholar: U. of California, Berkeley, 1986 Assistant Prof., 1988 Associate Prof., 1989-90 Research Scholar: U. of Illinois, Urbana-Champaign, Center for Supercomputing R&D, 1997 Prof., 2004 Director, Advanced Multicore Research Institute, 2017 member: the Engineering Academy of Japan and the Science Council of Japan 2018 Nov. Senior Vice President, Waseda Univ.

1987 IFAC World Congress Young Author Prize
1997 IPSJ Sakai Special Research Award
2005 STARC Academia-Industry Research Award
2008 LSI of the Year Second Prize
2008 Intel AsiaAcademic Forum Best Research Award
2010 IEEE CS Golden Core Member Award
2014 Minister of Edu., Sci. & Tech. Research Prize
2015 IPSJ Fellow, 2017 IEEE Fellow, Eta Kappa Nu

Reviewed Papers: 216, Invited Talks: 162, Granted Patents: 43 (Japan, US, GB, China), Articles in News Papers, Web News, Medias incl. TV etc.: 584

Committees in Societies and Government 255
IEEE Computer Society: President 2018, BoG(2009-14), Executive Committee(2017-), Multicore STC
Chair (2012-), Japan Chair(2005-07),
IPSJ Chair: HG for Magazine. & J. Edit, Sig. on ARC.
[METI/NEDO] Project Leaders: Multicore for
Consumer Electronics, Advanced Parallelizing
Compiler, Chair: Computer Strategy Committee
[Cabinet Office] CSTP Supercomputer Strategic
ICT PT, Japan Prize Selection Committees, etc.
[MEXT] Info. Sci. & Tech. Committee,
Supercomputers (Earth Simulator, HPCI Promo.,
Next Gen. Supercomputer K) Committees, etc.

Congratulations for the 70th Anniversary of Russian Computer Science

IEEE Computer Society would like to congratulate
the 70th Anniversary of the Russian Computer Science and
the conference of the Institute of System Programming of the Russian
Academy of Sciences with distinguished people including

- the Director of the Institute, the Russian Academy of Sciences, Professor Arutyun Avetisyan,
- Computer Pioneers: Dr. Tamara Alexandridi and Dr. Yuri Rogachev
- > IEEE CS Russian Chair Prof. Sergei Prokhorov,
- and the all Russian Computer Scientists.









2018 IEEE CS BoG & ExCom



BoG: Board of Governors

Executive Committee

New Executive Director:

Ms. Melissa Russell from
June 22.

Optical Society (OSA):
Chief Meetings and
Industry Officer



IEEE Computer Society

60,000+ members, volunteer-led organization,
200 technical conferences, 17 scholarly journals
and 13 magazines, awards program,
Digital Library with more than 550,000 articles and papers,
400 local and regional chapters, 40 technical committees,



IEEE CS Awards are presented in June BoG Meeting or COMPSAC June 7, 2018, BoG in Phonix



Bjarne Stroustrup: Morgan Stanley & Columbia Univ. 2018 IEEE Computer Society Computer Pioneer Award

IEEE COMPSAC2018 Keynote & Award Ceremony



July 26, 2018, Keynote, Hitotsubashi Hall







July 25, 2018 Award Ceremony Rihga Royal Hotel Tokyo



Margaret Martonosi: Princeton Univ.

2018 Computer Society Technical Achievement Award

IEEE COMPSAC2018 Keynote & Award Ceremony



July 24, 2018 COMPSAC Reception Gakushi Kaikan, Tokyo, Japan





July 24, 2018 Keynote Hitotsubashi Hall



IEEE Eta Kappa Nu (HKN) Japan First Initiation Ceremony for Waseda Univ. Student Chapter Mu Tau on July 25, 2018, in COMPSAC

IEEE HKN: Prof. Paolo Montuschi (Polytechnic Univ. of Turin),

IEEE Directors: John Walz (CS President 2012), Dejan Milojicic (CS President 2014)

CS Presidents: Sorel Reisman 2011 (COMPSAC Standing Committee Chair), Roger Fujii 2016,

Hironori Kasahara 2018, Cecilia Metra 2019, IEEE Japan Office Director: Iwao Hyakutake,

Waseda U.: Past President Prof. Katsuhiko Shirai, CS Past-Chair Prof. Keiji Kimura,

CS Japan Chair Prof. Kazu Yoshioka, CS Japan Past-Chair Prof. Hiro Washizaki,

Polytechnic Univ. Turin HKN Student Chapter Leaders, Waseda Univ. HKN Student Chapter Leaders



IEEE Young Professionals Panel on July 25

<u>Panelists: CS Presidents</u>: Roger Fujii, 2016(Moderator); John Walz, 2012; Dejan Milojicic, 2014; Hironori Kasahara, 2018; Cecilia Metra, 2019 Planned by IEEE Tokyo Young Professionals Chair Dr. Mayumi



July 25, 2018 COMPSAC YP Panel

Panel Title

How joining a professional society can be beneficial to the early and ongoing career development of Young Professionals





IEEE CS Baidu MoU Ceremony, 15:30-18:00 on July 23, 2018 at Waseda Univ. Green Computing Center, Tokyo, Japan

CS Presidents: Sorel Reisman 2011(COMPSAC Standing Committee Chair); John Walz 2012 (IEEE Director); Dejan Milojicic 2014 (IEEE Director); Roger Fujii 2016; Hironori Kasahara 2018; Cecilia Metra, 2019; Vice President: Andy Chen, IEEE Japan Office Director: Iwao Hyakutake, CS Beijing Office Specialist: Annette Jiang Baidu: Haizhu Dai, Product Manager; Hanjun Zhao, Product Manager; Jun Huan, AI scientist



Bob Ramakrishna Rau Award Lunch in MICRO51 in Fukuoka Japan on Oct. 23, 2018.

ACM/IEEE CS Micro51 with record high 706 Participants was operated by CS this year.



Rau Award Winner Dr. Ravi Nair, Rau Award Chair Dr. Kemal Ebcioglu & CS President Hironori Kasahara









General co-chairs Profs Koji Inoue & Mark Oskin with CS distinguished researchers and ACM SIGARCH CARE member in Banquet.



Cooperating with other IEEE societies and international sister societies

CCF (Chinese Computer Forum) **CNCC** (China National Computer Congress), Hangzhou on Oct. 25-27.

CCF has 40K members. CNCC had about 8000 participants inviting IEEE CS, ACM, IPSJ, KIISE, Hong Kong Computer Society, Dr. Robert Elliot Kahn and Prof. Kathy Yelick.



CCF/CS Young Computer Scientists Award Winners



ACM CEO Vicki, President Cherri, CS ED Missy, CCF Secretary General Zide Du &CS President Hironori







CCF Leaders & CS representatives



CS HPC Award Ceremony on Nov. 13 in SC2018, Dallas having 13,000 participants ACM/IEEE-CS Ken Kennedy Award Prof Sarita Adve

Seymour Cray Award Dr. David E Shaw





Sidney Fernbach Award Dr. Landa Petzalt





Choose Your Content Bundle	Preferred Plus Q More Info	Training & Development	Research More Info	Basic More Info	Student More Info
IEEE Member: Add Computer Society to your existing IEEE membership. IEEE Membership is an additional charge. Affiliate Member: Join Computer Society only as a Computer Society affiliate. IEEE benefits are not included. Student Member: Students must join IEEE when joining Computer	IEEE Member: \$30 Affiliate Member: \$78 JOIN NOW	IEEE Member: \$28 Affiliate Member: \$71 JOIN NOW	IEEE Member: \$28 Affiliate Member: \$71 JOIN NOW	IEEE Member: \$20 Affiliate Member: \$63 JOIN NOW	IEEE Student Member: \$4 New Student Member: \$20 JOIN NOW
Society. IEEE Student members can add Computer Society. Computer magazine (12 digital issues)* ComputingEdge (12 issues)	Ø	Ø	Ø	Ø	
Members-only discounts on conferences and events Members-only webinars Unlimited access to Computing Now, computer.org, and the new	Ø Ø	Ø Ø	Ø Ø	Ø Ø	Ø Ø
mobile-ready myCS Local chapter membership Skillsoft Skillchoice™ Complete with 67,000+ books, videos, courses, practice exams and mentorship resources	Ø	Ø	Ø	Ø	Ø
Books24x7 on-demand access to 15,000 technical and business resources Two complimentary Computer Society <u>magazines</u> subscriptions	Ø	Ø	Ø		Ø
myComputer mobile app Computer Society Digital Library	30 tokens 12 FREE downloads	Member pricing	30 tokens 12 FREE downloads	Member pricing	30 tokens
Training webinars Priority registration to Computer Society events	3 FREE webinars	3 Free webinars	Member pricing	Member pricing	Member pricing
Right to vote and hold office One-time 20% Computer Society online store discount	0	Ø	Ø	Ø	

 $^{^{\}star}$ Print publications are available for an additional fee. See IEEE catalog for details.

World's best educational content



Practical Innovation

Multicore processors have become pervasive, but most organizations struggle to use them efficiently. That's why we brought together renowned experts in the field

for this video series to examine the innovative techniques they use to improve reliability and performance while reducing costs, time, and power consumption.

Hear about some of the most advanced powerreduction, parallelization, and vectorization technologies used in a range of industry applications, including automobiles, big data, cloud computing, cluster computing, medical image processing, multimedia, smartphones, and supercomputing.

Individual Videos

- IEEE CS Members: \$30
 Nonmembers: \$125
- Full Series:
- IEEE CS Members: \$195
 Nonmembers: \$1,000

Learn from the World's Leading Multicore Compiler Experts



Automatic Parallelization



Dependences and Dependence Analysis Utpal Banerjee



Instruction Level Parallelization Alexandru Nicolau



The Polyhedral Model Paul Feautrier



Vectorization P. Sadayappan



Vectorization/Parallelization in the Intel Compiler Peng Tu



Autoparallelization for GPUs Wan-mei Hwa



Dynamic Parallelization Rudolf Eigenmann



Multigrain Parallelization and Power Reduction Hironori Kasahara



Vector Computation David Kuck



Vectorization/Parallelization in the IBM Compiler Yaoqing Gao



Roundtable Discussion

Who Should Watch these Videos?

Professionals in any industry that demands real-time processing, high performance, and speed will find these videos an important tool for getting better results from their multicore processing systems and future-proofing their applications.

Educators and graduate students will also find inspiration from this window into the minds of some of the most accomplished experts in multicore.

www.computer.org/multicore-video





Self-Paced Learning:

Approximate time = 12 hours

• PDH: 12.0

• CEU: 1.2

Full Series Price:

• IEEE CS Member: \$195

Nonmember: \$1,000

Individual Videos:

• IEEE CS Member: \$30

Nonmember: \$125

See individual videos below.

For questions, please contact

certification@computer.org

