

# COMPSAC 2018

## Staying Smarter in a Smartening World

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While the theme of the 42nd annual IEEE Computer Society COMPSAC conference—“Staying Smarter in a Smartening World”—was certainly compelling, the weather was another main topic of discussion, with record-breaking temperatures reaching 106° F in Tokyo, Japan. The conference, held from 23 to 27 July, concluded with attendees’

attention shifting to Typhoon Maria, which hit Tokyo the day after the conference. Despite the climate, the almost 500 attendees from 36 different countries (a near record for COMPSAC) presented, discussed, and debated more than 120 papers on topics at the core of what we do as computing technology researchers and practitioners.

The future was on participants’ minds this year, with a panel called “A Smarter Future with New and Emerging Innovations and Predictions” (sponsored by the IEEE Future Directions group) and the annual “Future of Computing” panel, led by COMPSAC founder Stephen Yau.

The importance of the future was also reinforced at the annual awards banquet, where two prestigious IEEE Computer Society (CS) awards were presented. CS awards are usually presented at the Board of Governors Annual Awards Banquet in June. This year, the CS invited COMPSAC to present some of these awards at COMPSAC’s annual banquet, organized and hosted by Claudio Demartini, head of the Department of Control and Computer Engineering at Politecnico di Torino. The Computer Pioneer Award was presented to Bjarne Stroustrup “for bringing object-oriented programming and generic programming to the mainstream with his design and implementation of C++,” and to Margaret Martonosi “for contributions to power-aware computing and energy-constrained mobile sensor networks.”

Stroustrup and Martonosi each presented keynotes regarding their own software and hardware work, highlighting the conference theme that computer technologies are producing profound changes in society. For example, emerging developments in areas such as deep learning—supported by increasingly powerful and miniaturized hardware—are beginning to be deployed in architectures, systems, and applications that are redefining the relationships between humans and technology. As this happens, humans are relinquishing their roles as masters of technology to partnerships wherein Internet of Things (IoT) environments and autonomous, computer-driven devices are becoming prevalent. The implications of this can be seen in underlying architectures that drive such changes. CS President Hironori Kasahara and President Emeritus Dejan Mijoćic, in plenary keynotes, both discussed future processor hardware and software implications, particularly related to the “end of Moore’s law.”

While most IEEE and CS conferences are primarily targeted to a research audience, COMPSAC has broadened its scope in recent years to also address concerns of practitioners. In this regard, the IT in Practice (ITiP) symposium was introduced in 2016, this year attracting two dozen submissions. Coupled with the symposium were two related programs: complimentary downloads of

*IT Professional's* 20th anniversary issue (January/February 2018) and the presentation of the CS's Distinguished Service Award by *IT Professional's* editor in chief (EIC), Irena Bojanova, to the outgoing EIC, San Murugesan.

Reflecting creative departures from conventional conference paper presentations, two different contests were included in this year's conference: IEEE Big Data's Hackathon on Big Data Governance and Metadata and Management (organized by Future Directions' Kathy Grise and sponsored by the IEEE Brain Initiative, the IEEE Big Data Technical Community, and the IEEE Standards Association), and the Proxor-sponsored Java Programming T1 Challenge. Both contests reflected an interest in increased interactivity among conference attendees.

COMPSAC also introduced important new services for conference authors and presenters. The first is Open Preview, a new IEEE initiative that provides free digital library access to all conference papers 30 days before until 30 days after the conference. This initiative enables attendees (and anyone else) to read full conference papers prior to (or without) attending actual sessions, and exposes authors' research to a broader audience earlier.

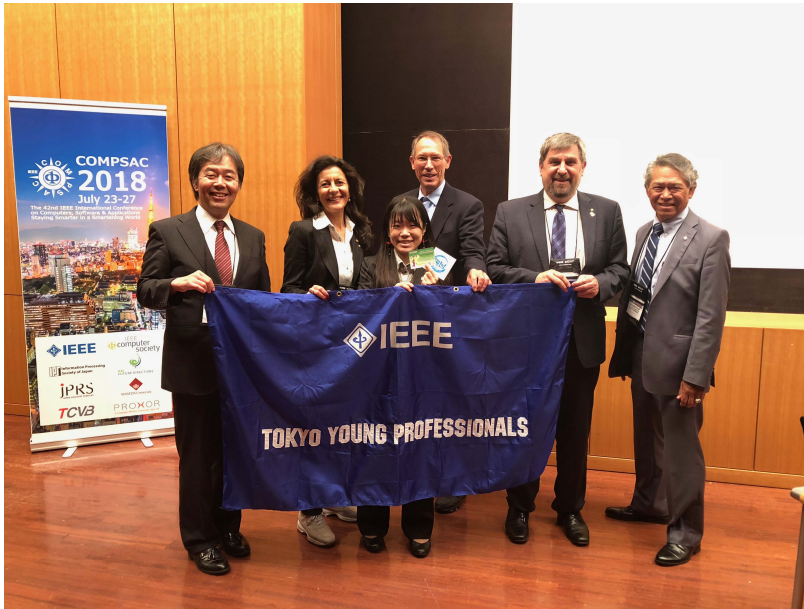
The next offerings for authors are the C1J2 and J1C2 programs. In the former case, conference organizers provide IEEE publications ("best papers") for consideration for publication outside of the conference proceedings. (The decision to publish is entirely that of the respective EICs and their review communities.) J1C2 is different and somewhat untraditional in that papers that have been previously published (or accepted for publication) in peer-reviewed journals are considered the basis for presentation at COMPSAC. In this program, accepted authors must present new content or new research based on the previously published paper.

Highlighting this year's conference were two highly successful programs first introduced at the 2017 COMPSAC in Turin, Italy: the induction of an IEEE Eta Kappa Nu (IEEE-HKN) chapter (the first-ever Japanese chapter at Waseda University, coordinated by Paolo Montuschi) and the COMPSAC 2018 Young Professionals session, which was moderated by Young Professionals representative Mayumi Suzuki and 2016 CS President Roger Fujii.

IEEE-HKN is IEEE's honor society consisting of students, alumni, and other professionals (including IEEE members) who have demonstrated exceptional academic and professional accomplishments. Student members are selected on the basis of scholastic standing, character, and leadership. Professional members are nominated by a current member and selected by virtue of their contributions.

This year's Young Professionals panel of five CS-elected presidents (Cecilia Metra, 2019; Hironori Kasahara, 2018; Roger Fujii, 2016; Dejan Milojicic, 2014; and John Walz, 2012) talked about their personal views on how joining a professional society was beneficial to their early and ongoing career development. The purpose of the session was to help young professionals understand the unique value and opportunities that IEEE and CS membership and volunteerism provide for career development.

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From left: Current, future, and past IEEE Computer Society presidents Hironori Kasahara, Cecilia Metra, John Walz, Dejan Milojicic, and Roger Fujii pose with Young Professionals representative Mayumi Suzuki at COMPSAC 2018.

In 2019, COMPSAC will be hosted by Marquette University in Milwaukee, Wisconsin, from 15 to 19 July. The theme is “Data-Driven Intelligence for a Smarter World,” and important dates related to the call for papers can be found at <https://ieeecompsac.computer.org/2019>.

## ABOUT THE AUTHOR

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