



Achievements and Future Directions: IEEE Computer Society 2025 Reflection

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The IEEE Computer Society (CS) President, Hironori Washizaki, together with the Vice Presidents, reflects on the remarkable year of 2025 by reviewing the programs and activities

the CS has accomplished in alignment with its strategic goals and looks ahead to the future toward the 80th anniversary.

The CS envisions being the global leader in providing technical information, community engagement, and personalized services to computing professionals worldwide. To advance this vision, at the beginning of 2025 the CS reaffirmed its focus on three strategic goals: G1) engaging members, with particular emphasis on students and early career professionals; G2) engaging industry individuals and organizations; and G3) leading in new technical areas.¹ These priorities are pursued through programs and activities guided by three operational



themes: T1) empowering the volunteer base, T2) enabling nimbleness in execution, and T3) broadening participation. Originally identified by the 2020 CS Planning Committee as the three-year plan, these goals were extended through 2025 to be further reinforced and embedded across the Society.

STRATEGIC GOALS AND THEIR ACHIEVEMENTS

The CS has had one of its most active years in nearly 80 years of history. Thanks to the dedication of our volunteers, members, and collaborators, and the leadership of the 2025 Executive Committee (ExCom) and Board of Governors (BoG) (see “The 2025 Leadership Team”), the CS has surpassed its stated goals. These achievements were made possible through the coordinated efforts of program boards and BoG-led initiatives, all carried out in

a financially sound manner, as illustrated in [Figure 1](#).

G1. *Member engagement, with particular focus on students and early career professionals:* This goal has been advanced primarily through membership growth, engagement, and educational activities led by the Member and Geographic Activities Board (MGA), the Professional and Educational Activities Board (PEAB), and the Technical and Conference Activities (T&C) Board. These efforts have resulted in increased CS membership, notably a rise in both professional and student members, as well as recognition through the 2025 IEEE EAB Society/Council Professional Development Award. Professional

periodicals and standards from the Publications Board and Standards Activities Board (SAB) have also supported the development of careers and expertise. Additional BoG-led initiatives, such as the Top 30 Early Career Professionals recognition program, further reinforce this goal.

G2. *Industry engagement:* This goal has been strengthened through professional career opportunities and validated technical products, services, and events, as well as standards for interoperability provided by the PEAB, T&C, Publications Board, and SAB. It has also been supported by the MGA and BoG-led initiatives such as the industry-focused summit and the annual Technology Predictions.

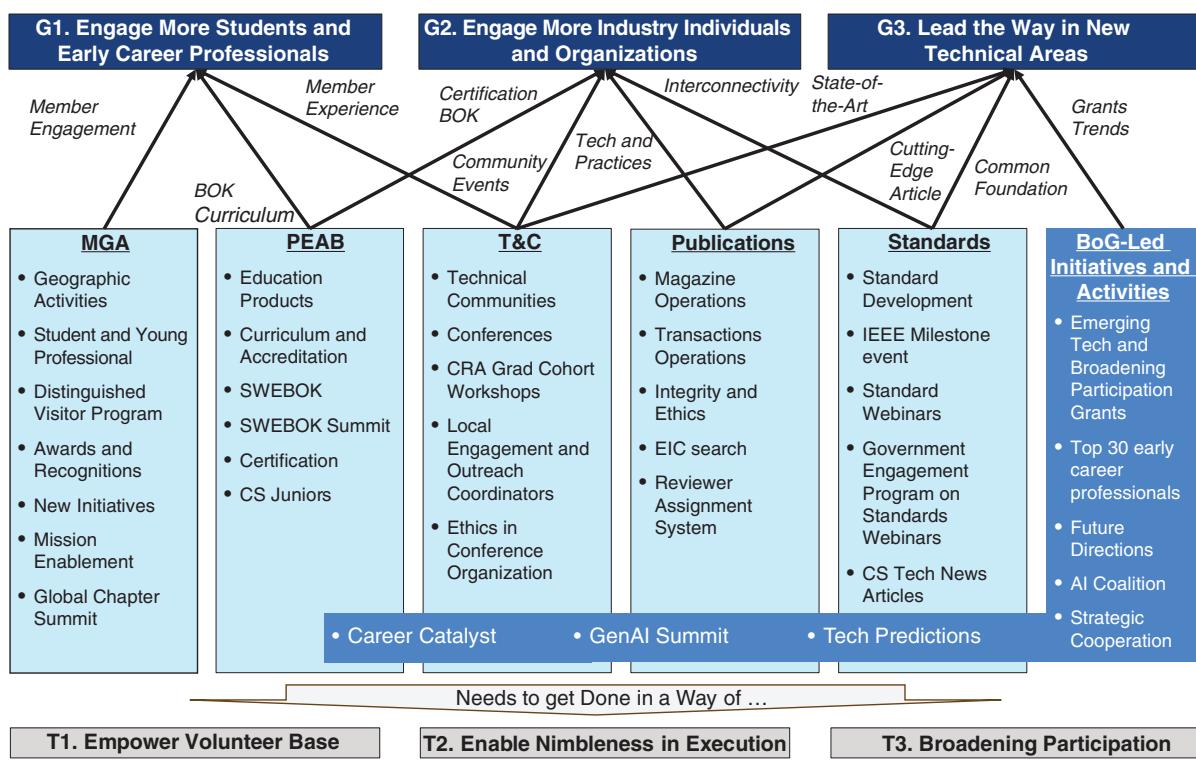


FIGURE 1. Strategic goals and themes with corresponding program boards and activities.

2025 LEADERSHIP TEAM

The CS cannot fulfill its mission without the dedicated support of our volunteers, guided by the Executive Committee, including the authors and the following leadership, and the members of the Board of Governors.

- » Hironori Washizaki: President
- » Grace A. Lewis: President-Elect
- » Jyotika Athavale: Past President
- » Nils Aschenbruck: Vice President
- » Yoshiko Yasuda: Secretary
- » Darren Galpin: Treasurer
- » Andrew Seely: VP, Member & Geographic Activities
- » Cyril Onwubiko: VP, Professional & Educational Activities
- » Charles (Chuck) Hansen: VP, Publications
- » Edward Au: VP, Standards Activities
- » Terry Benzel: VP, Technical & Conference Activities
- » Cecilia Metra: 2025–2026 IEEE Division VIII Director
- » Christina M. Schober: 2024–2025 IEEE Division V Director
- » Leila De Floriani: 2025 IEEE Division V Director-Elect
- » Anne Marie Kelly: Interim Executive Director

G3. *Leading in new technical areas:* This goal has been realized through state-of-the-art technical papers and articles, as well as foundational standards that establish a shared understanding of emerging areas, provided by the T&C, Publications Board, and SAB. The MGA, PEAB, and BoG-led initiatives, including the Emerging Tech Grant and future directions activities, have provided additional support.

In the following sections, we summarize the initial goals, challenges, corresponding activities, and achievements, as well as the prospects of each program board and related BoG-led initiatives.

MEMBER AND GEOGRAPHIC ACTIVITIES (MGA)

The MGA Board (MGAB) is responsible for supporting chapters and members

around the world. MGAB's span includes the Geographic Activities Committee (GAC), Students and Young Professionals (SYP), Distinguished Visitors Program (DVP), Awards and Recognitions Committee (ARC), and two ad hoc committees, New Initiatives Committee (NIC) and Mission Enablement Committee (MEC).

MGAB set three high-level goals for 2025: Increase the perceived value of membership, increase industry engagement, and improve operational efficiency. These goals were established to support the higher-order Society goals for member and industry engagement.

This year we started several new initiatives aligned with our goals. Our greatest success was hosting the Global Chapter Summit (GCS) in Tokyo, Japan. The GCS, planned by MGAB GAC, built on the previous year's inaugural summit and added a more structured format with purposeful outcomes for attendees.

MGAB started a new Volunteer Resource Management (VRM) effort this year, with a goal to harness the energy and expertise of member volunteers through well-bounded, transactional volunteer opportunities. The VRM has built a pool of several hundred active and responsive volunteers and has successfully supported several reviewing and judging activities to date. The leadership challenge is to maintain active contact over time to ensure that volunteers are engaged and ready for opportunities.

We continue work on several initiatives as we approach the end of the year, including developing a "sister student chapter" program to pair successful and established student chapters with new or struggling chapters elsewhere in the world, creating a Global Incubator framework to support computing startup entrepreneurs, establishing a localized coding competition framework to encourage more student participation, and building a repeatable career prep workshop with Society senior members to conduct at student chapters.

PROFESSIONAL AND EDUCATIONAL ACTIVITIES BOARD (PEAB)

The PEAB provides leadership within the CS on initiatives that advance computing education and foster the professional growth of practitioners across disciplines such as computer engineering, computer science, information technology, information systems, data science, cybersecurity, and software engineering.

To achieve these goals, PEAB develops and sustains programs that address the evolving needs of both academia and industry. Our work spans the definition of bodies of knowledge, development of best practices, articulation of competencies, promotion of ethics, establishment of performance norms, and refinement of professional terminology.

Among our key accomplishments are the launch of several high-impact initiatives, including the Computer Science Curriculum (CS2023)², the

Software Engineering Body of Knowledge, Version 4 (SWEOK V4)³, the CS4Industry Career Catalyst Summit, and the inaugural CS Juniors Program. The CS Juniors Program is designed to inspire and engage K-12 students worldwide, fostering early interest in computing disciplines while creating meaningful connections between students and senior members of the Society. Since its inception in October 2024, the program has hosted events in Montevideo, Uruguay; Tonantzintla, Mexico; Tunisia; and Sayama, Japan—and has already received 25 additional proposals for future global events.

These achievements were recently recognized with the IEEE EAB Award, which will be presented to PEAB and the CS on 21 November 2025, “for advancing global computing education and professional development innovation, the evolution of the Software Engineering Body of Knowledge, and strategic collaboration between academia and industry.”

Looking ahead, PEAB is preparing to launch its new industry-standard professional certifications—IEEE Computer Society Certified Software Professional, Levels 1 & 2—in the Fall 2025.

T&C BOARD

The T&C Board provides vision, leadership, and an organizational home for technical innovation and information exchange. Our mission is to establish the CS's technical activities as premier forums for innovation, information, and services in both current and emerging fields. In 2025, this work remained central as we oversaw 29 Technical Communities and more than 200 conferences worldwide. These communities and events continue to identify and advance opportunities that benefit humanity, engaging students, local chapters, university researchers, industry, and nonprofit organizations.

Addressing growth and member experience

A key challenge in 2025 was the continued surge in conference submissions,

expositions, and attendance and supporting this growth without losing sight of our mission required renewed focus on access, quality, and member experience. Conferences remain the centerpiece of T&C activity, and co-sponsorship with other societies and professional organizations extended our reach and fostered multidisciplinary development. Several important initiatives were launched and supported this year, as follows:

- › *Career Catalyst Scholarship Program:* Designed to bridge the gap between academic learning and industry employability, this new program provides students with mentoring, industry sponsorship, and professional networks to build the skills needed for successful careers in computing and technology.
- › *Computing Research Association (CRA) grad cohort workshops:* T&C proudly sponsored the 2025 workshop and committed to supporting the 2026 event. This program offers critical mentoring, networking, and professional development to broaden participation in computing graduate education and research.
- › *Local engagement and outreach coordinators:* This effort connects conferences more directly with local IEEE sections and chapters, opening gateways for volunteering, collaboration, and community participation.
- › *Ethics in conference organization:* In response to increasing ethical challenges in conference management, T&C established an Ad Hoc Committee on Ethics in Conference Organization, working closely with the Publications Board's Integrity Committee and CS staff. Recent years have seen issues ranging from conflicts of interest and problematic program committee composition to counterfeit conferences. To protect the Society's reputation

and our communities, the committee convened leaders from diverse conferences and research domains to create standardized processes and guidelines. The next step will be developing training materials, webinars, and community engagement to raise awareness and promote adherence to higher ethical standards.

Looking Ahead

T&C enters 2026 prepared to address ongoing challenges in technical communities and conferences, including rapid growth, the pervasive influence of artificial intelligence (AI), and complex ethical considerations. Many of these challenges extend beyond the CS alone, and we look forward to working with sister societies and community partners such as CRA.

PUBLICATIONS BOARD

The Publications Board manages the periodicals portfolio of the CS. The Publications Board Executive Committee is made up of volunteers, many of whom have been past Vice Presidents for Publications, former Editors in Chief (EICs), and members of the Board of Governors (including the Magazine Operations Committee and Transactions Operations Committee Chairs). The Publications Board Executive Committee meets regularly at monthly online meetings and stays in touch through email.

The overall goal of the Publications Board is to steward our publications and increase their engagement and impact. This is accomplished through EIC searches (for open EIC positions), maintaining integrity and ethics in publications, improving the peer review workflow for EICs, and being judicious about new periodicals.

Ensuring that our publications uphold IEEE's standard of integrity and ethics is critical for maintaining the excellence of our publications. We actively address integrity and ethics issues as they arise. Dan Katz, our

2025 Integrity Committee Chair, has been instrumental in leading this effort along with support from CS and IEEE staff. Another challenge, that we have not yet resolved, is detecting the use of Generative AI in both authoring and reviewing. This is an ongoing issue.

The EIC's peer review workflow is important to the editorial process. We have been working closely with IEEE Publishing Operations to see how new tools, including a reviewer assignment system, can be integrated into the ScholarOne Manuscripts system. The

IEEE Standards Association (IEEE SA) offers individual and entity membership programs. The CS continues to be the biggest society in terms of the IEEE SA entity PARs and standards. Our CS Blockchain and Distributed Ledger Standards Committee was awarded the 2024 IEEE SA Standards Committee Award for Outstanding Contributions to Entity Standards Development for overseeing the development of a significant number of IEEE blockchain and distributed ledger standards, including standards for green and sustainable development. It

Standards (GEPS) webinars on various policy topics to improve the awareness and branding of the CS standards to policy makers around the globe.

Looking ahead, SAB plans to establish additional standards committees and expand the scope of a few existing standards committees to cover exciting and emerging topics such as digital trust, trust data spaces, and Web 3.0.

GRANTS AND RECOGNITIONS

In addition to the program board activities noted previously, the CS has advanced a range of BoG-led initiatives and related strategic efforts. These include society-level grants and recognitions such as the Grants for Emerging Technology Activities, the Broadening Participation Fund Grants, and the Top 30 Early Career Professionals program. These initiatives play a vital role in engaging members, especially students and early career professionals, while also promoting broadening participation, regional activities, and stronger industry involvement.

TECHNOLOGY PREDICTIONS AND AI INITIATIVES

Annual Technology Predictions has contributed to the broader community by exploring new areas, such as next-generation AI and quantum computing. The 2025 edition, developed under the leadership of Dejan Milojicic, highlights 22 breakthrough technologies poised to shape the future for decades to come. These include large language model/AI agents, mis/disinformation, AI-based medical diagnosis, next-generation cyberwarfare, and more.⁴

To strengthen industry engagement and collaboration, the CS inaugurated two industry-focused summits in 2025. The IEEE Enterprise Generative AI Summit brought together industry leaders, innovators, and AI practitioners to explore how generative AI is shaping the future of enterprises. The IEEE SWEBOK Summit brought together professionals to exchange experiences and challenges

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goal is to limit the underlying corpus of reviewers to relevant CS periodicals and conference proceedings. This work is ongoing and will continue into the future.

In summary, CS Publications are in good shape, and issues are being addressed to better position our periodicals for the future. The VP for Publications wants to thank the volunteers that make the Publications Board a success. It is not done by one person but takes effort from all.

STANDARD ACTIVITIES BOARD (SAB)

The SAB organizes and promotes Standards Committees and related activities on behalf of the CS. The CS strongly supports the development of new technical standards to reflect the continuous creation of new practices and technologies. As of the writing of this article, 18 CS standards committees and their working groups are currently developing over 300 new standards development projects (also known as project authorization requests) and publishing over 284 new standards.

is a very important and well-deserved recognition.

While SAB sponsored and celebrated the IEEE Milestone Event that recognized significant contributions of one of our Standards Committee, IEEE 802 (that is, CS LAN/MAN Standards Committee), to technology and economics by developing global network communication standards in 2024, we celebrated the 50th anniversary of the CS Software & Systems Engineering Committee and sponsored the 40th anniversary of the Working Group that manages IEEE Std 754 (IEEE Standard for Floating-Point Arithmetic).

To further raise the awareness of our standards activities among our CS members, SAB not only organized a record number of standards webinars about different hot and emerging topics of CS standards but also started a new initiative this year by publishing articles on CS TECH NEWS about new standards projects and published standards. We also grew our collaboration with other IEEE committees, especially, the IEEE SA, by organizing four Government Engagement Program on

while providing future research directions on the SWEBOK Guide, related skills, and competencies.

Building on these efforts, CS executives have worked to provide a holistic view of the Society's AI-focused programs and products, to position the CS as one of IEEE's primary authorities in AI and other cutting-edge technologies.

STRATEGIC COLLABORATIONS

The CS has expanded its programs and products by strengthening synergies among them and deepening collaborations with other IEEE organizational units and alliances, such as IEEE Future Directions and the AI Coalition, as well as with external professional societies and organizations, including ACM, CCF, GI, IPSJ, SCS, KIISE, and CRA.

Over the course of this year, the CS intensified its strategic cooperation with the CRA by collaboratively organizing two visioning activities. The activity (CRA-CCC visioning workshop) on "Computing on the Fly: Navigating a Vision for the Future of Drone Computing" takes place in December 2025 and the workshop on "Beyond Code: Engineering Trustworthy Software Systems with AI at Scale" will take place in February 2026. These activities took into consideration our technology predictions and explore new ways to foster new research directions (together with CRA-CCC) fulfilling our mission on empowering computer science and engineering professionals to fuel continued advancement and to guide the future enabling new opportunities to better serve our world.

OPEN ACCESS PUBLICATION

The CS follows IEEE's policy on open access. IEEE strives to support all authors and readers globally. That means being able to offer any author a publication venue that is compliant with their circumstances, regardless of their funding status, the publishing mandates they may have

in place, or where in the world they may work.⁵

To that end, IEEE provides authors with choices and a range of options to publish in traditional journals or in a fully open access journal. IEEE continues to support open science and provide more options and choices to support the work and needs of all authors and researchers.

CONCLUDING THE REWARDING JOURNEY

The CS President has attended numerous CS-sponsored and related conferences and gatherings. These

sister societies' events, such as the IPSJ and CCF national conventions. At each occasion, the President worked to engage and inspire participants, share the Society's vision, observe technical and regional community activities, listen to diverse perspectives, and bring those insights back to help shape CS strategies in collaboration with the VPs and leadership team.

We have been honored to lead this remarkable journey, advancing the growth and impact of the CS and the broader community throughout the year. We sincerely thank our volunteers, members, partners, and supporters for their

These include large language model/AI agents, mis/disinformation, AI-based medical diagnosis, next-generation cyberwarfare, and more.

ranged from major global assemblies to smaller local events, including SC, ICSE, Quantum Week, ICCV/ISMEV, ISCA, COMPSAC, SERVICES, CAI, HOST, RE, LCN, Region meetings, and MGA/SYP gatherings, as well as the

dedication and contributions, which have been essential to our success.

We also extend our gratitude to the CS staff for their outstanding support, operations, and management. Special recognition goes to our outgoing



FIGURE 2. CS Global Chapter Summit (GCS) participants with ExCom/BoG in Tokyo.



FIGURE 3. CS BoG and staff in California.

executive director, Melissa A. Russell, and retiring staff Maggie Johnson, for their long-standing leadership and service. Figures 2 and 3 highlight how CS leadership, volunteers, and staff share passion and joy in working together.

LOOKING AHEAD TO THE 80TH ANNIVERSARY

Building on the tremendous success of 2025, we are shaping the next three-year strategic plan under the leadership of 2026 CS President Grace Lewis. The plan envisions continuous and sustainable growth for our community, while fostering a broader and more responsible impact on humanity through the interdisciplinary and collaborative nature of computing in the era of AI and the digital society.

Next year, the CS will celebrate a significant milestone, its 80th anniversary since its founding in 1946. The celebration has already begun, with activities such as the CS Madras Chapter's *Mega ICT Quiz* held in the lead-up to this landmark year. We invite all members to join the celebration, help

expand and strengthen our community, and look forward to shaping the next 80 years together. ☺

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