

State of the Society

Presented by Min Wu
President, IEEE Signal Processing Society

ICASSP 2024 | Seoul, Korea

Welcome to ICASSP Week 2024!



A Flagship Conference of the **IEEE Signal Processing Society**

A Journey over **12** years of
Vision, Teamwork, and Perseverance

Big Thank You to ICASSP 2024 Organizing Committee



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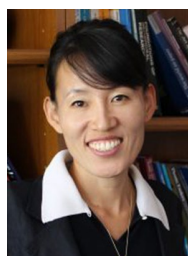
Chanwoo Kim

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Osvaldo Simeone

*Tech. Program
Vice-Chair*



Jing Huang

*Tech. Program
Vice-Chair*

and many more
contributors ...



Big Thank You to ICASSP 2024 Organizing Committee





Celebrating Milestones

- **75th** SPS anniversary year in 2023
- Record high member# in Feb. 2024:

23,293

SP innovators, pioneers, and current & future leaders!



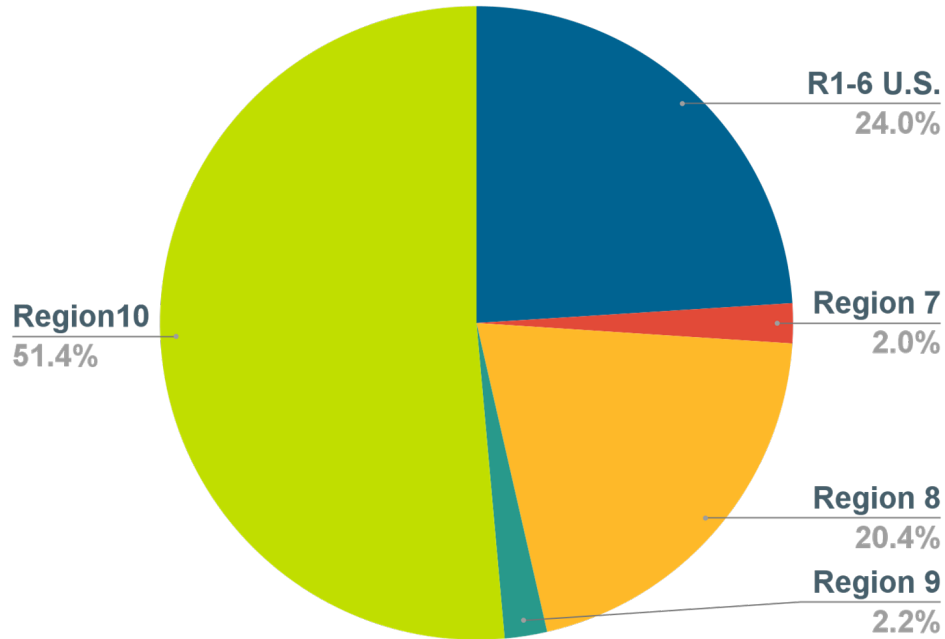
IEEE
Signal Processing
Society™

CELEBRATING 75 YEARS

IEEE members are also growing: **474 K+** in Feb. '24.
Student members 181 K+; Society members 382 K+



23K+ SPS Members



Grown **20%** from 2023 to 2024

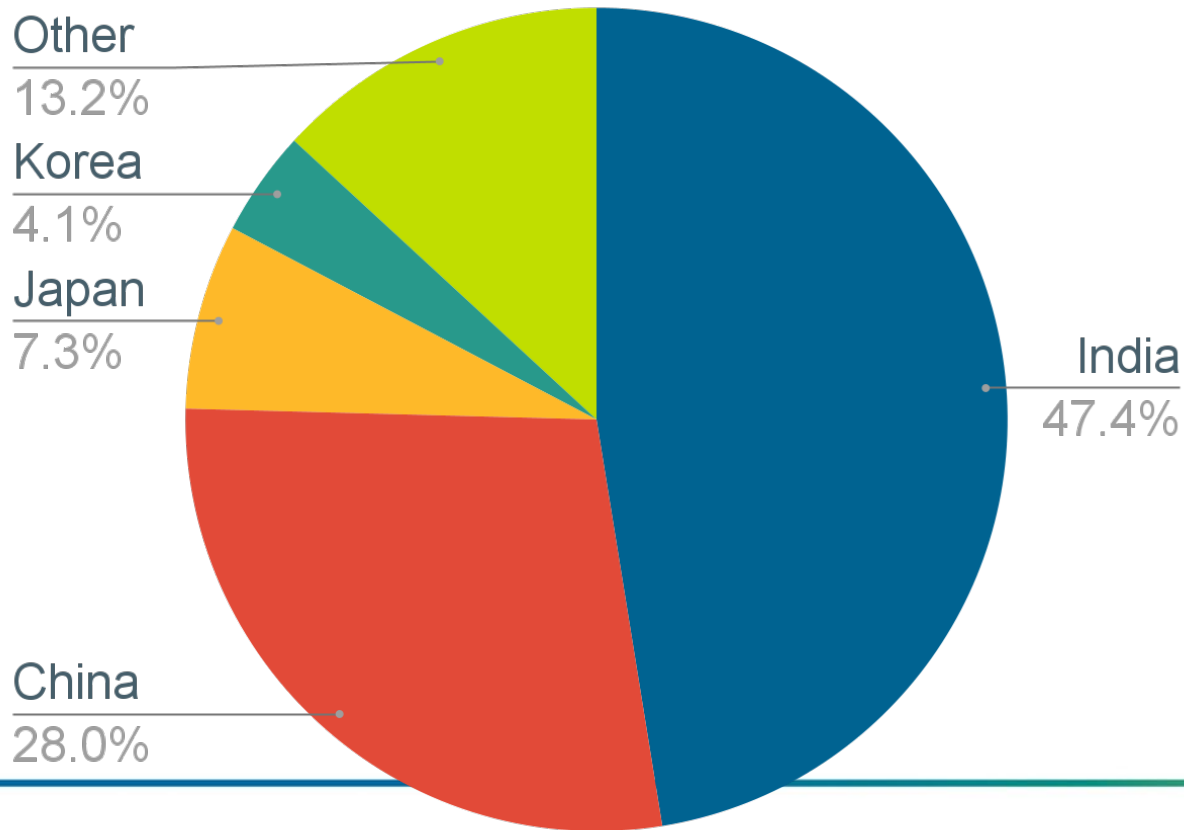


Top 3 countries account for **60%** of SPS membership:

- ▶ **India** 5,682 (Students ~4K + GSM 377)
- ▶ **U.S.** 5,596 (S+GSM ~614)
- ▶ **China** 3,351 (S+GSM ~1600)
- ▶ Japan (871), Germany (676), UK (568)
- ▶ In 400-500s: **Korea** (497), Canada, France, Italy

R1-6 US	R7 Canada	R8 Euro-Africa	R9 Latin Am	R10 Asia-Pacific	Total
5,590	473	4,749	504	11,977	23,293

Region 10: A closer look



Top five R10 countries:

- ▶ India – ***ICASSP 2025!***
- ▶ China
- ▶ Japan
- ▶ Korea – ***ICASSP 2024!***
- ▶ Australia

Road to SPS 100: 2024 → 2048

- Envisioning the challenges and opportunities of the **next 25 years**
- Work together as a **global community** to make our shared **professional home** better for all
- **“IEEE 2050”** Vision shaped in '22
<https://www.ieee.org/about/corporate/ieee-in-2050.html>

What are our Centennial Aspirations? How to prepare/achieve?

- Aspiring **size** of membership; **value, benefits & engagement** for members
- Outcome of our roles in advancing SP as **an evolving field**

Strategic Vision

Aims to create **an inclusive, open-minded, and collaborative environment** that serves as the **professional home** for all members' career development and promotes **technical excellence and technological & societal impact**

Lead

in technical excellence and expand scientific knowledge in new areas

Increase

engagement of industry & early-career members and cultivate volunteer development

Develop

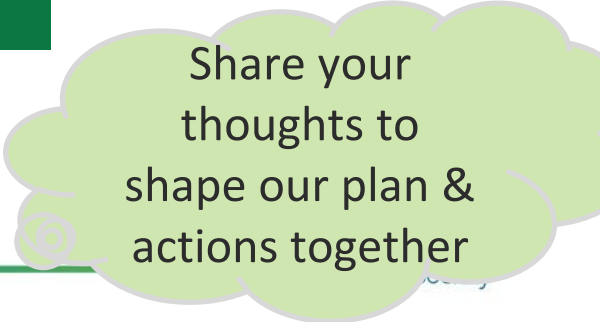
high-quality professional educational training to support life-long learning

Evolve

our organizational structure to meet current and future challenges

Foster

diversity, inclusion, and fairness for members & volunteers



Share your thoughts to shape our plan & actions together

Many Dimensions of diversity in our Global Community

- Gender | Ethnicity / Race
- Geographic Area | Age / CareerStage
- Career Sector | Technical Area; ...
- Tech. Flavor (theory, algorithm design, practical systems/products); ...

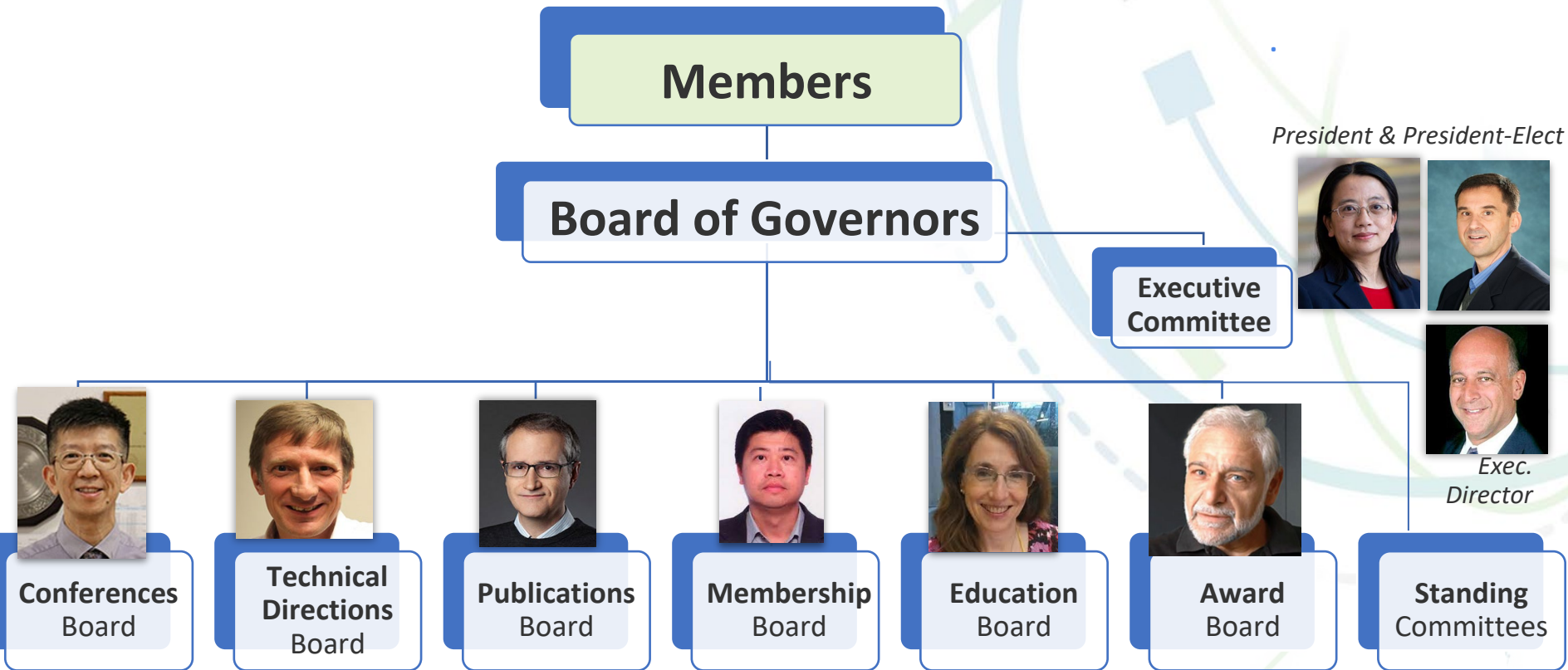
Events at SPS conf. and year-round committee efforts

- Micro-Mentoring | Career Fair
- WISP for Women & supporters
- Young Professionals | Entrepreneurs
- PROGRESS Academic Career Panel ...

- **New Fellow Search Committee (FSC) underway:**
 - Support promising candidates thru mentoring; improve nomination quality
 - Increase # of high-quality nominations in underrepresented areas
- Longer-term **career development** and **peer mentoring**

**To All IEEE Fellows in SPS:
Join force to support our colleagues !**

SPS: Under the Hood



Thank you for your service!



Athina Petropulu
President
2022-2023



Ana Isabel Pérez-Neira
Vice President-Conferences
2021-2023



Marc Moonen
Vice President-Publications
2021-2023

And retiring **Regional Directors** and **Members of Board of Governors, Editors-in-Chief, TC Chairs**, past conference chairs, and many **editors** and **committee members**, as the world recovers from COVID-19

IEEE Signal Processing Society Staff



Rich Baseil

Executive Director



Theresa Argiropoulos

Director, Operations

- ▶ **Deborah Blazek**, *Senior Admin, Governance & Awards*
- ▶ **George Olekson**, *Chapter & Operations Associate*
- ▶ **Jessica Perry**, *Member Communications & Experience Specialist*
- ▶ **Jaqueline Rash**, *Membership Program & Events Administrator*



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Senior Manager, Conferences

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- ▶ **Nicole Allen**, *Senior Conference Administrator*
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*Senior Manager,
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- ▶ **Nanette Januszkiewicz**, *Peer Review/Educ Prog Administrator*
- ▶ **Mikaela Langdon**, *Peer Review/Educ Prog Administrator*
- ▶ **Rebecca Wollman**, *Senior Pub Peer Review Support Specialist*



Industry Engagement

- Exploring organizational structure to facilitate **company engagement** and **career development** of industry members
- **Industry programs during the ICASSP Week 2024**
 - Industry plenary, spotlight talks & colloquia
 - Industry exhibits & workshops
 - Student job fairs and student-industry luncheon
 - Entrepreneur forum

**ICASSP 2024
Industry Program Chairs**
Sanghoon Lee
Jiwoo Kang
Taewan Kim
Shoko Araki Siqui Cai
John Apostolopoulos
Eliathamby Ambikairajah

IEEE Education Week 2024: This Week @ ICASSP

Growing educational portfolio at SPS

- **SigPort:** post your slides & posters
- **Resource Center:** video talks & tutorials
- **Mentoring activities:** micro mentoring @ ICASSP/ICIP
- **Short courses:** 3rd year @ ICASSP
- **Curation:** SP course weblinks, textbooks, lecture material, etc.

The IEEE Education Week logo, featuring the word "IEEE" in blue above "Education Week" in green. The letter "o" in "Education" is replaced by a globe icon. A dashed blue line curves around the text from the top right.

Educational Short Courses at ICASSP 2024

Visit the registration desk to sign up!



In-depth & multi-facet understanding of a topic

- ▶ **10-hour courses** in three sessions (Wednesday-Friday)
- ▶ Hands-on experience and deep dive into topic areas
- ▶ Professional develop. certificate (**PDH**) for training hours
- ▶ Also **on-demand @SPS Resource Center** (w/ member discount)

Thank you to all course instructors,
SPS Edu Board, and contributors!

Seasonal School & Short Course Chairs

Seungjin Choi Minje Kim
Hyungmin Park

PRACTICAL GUIDE TO COMPUTATIONAL IMAGING: FROM BASICS TO BRILLIANCE

Come to learn from authors of *Nature* and *Cell* articles on cutting-edge computational imaging technologies, gain insights on imaging principles, system architectures, and enabling algorithms, and try out yourself with hands-on experiments.



Lu Fang
Tsinghua University



Liangcai Cao
Tsinghua University



Jiamin Wu
Tsinghua University



Xun Cao
Nanjing University



Jinwei Gu
The Chinese University of Hong Kong



Yifan Peng
The University of Hong Kong



Gaochang Wu
Northeastern University



Xiaoyun Yuan
Tsinghua University

RF SENSING for WIRELESS AI PERCEPTION

Come to learn the theories, algorithms, and applications from leading technologists and earn **CEUs/PDHs** certificates



Chenshu Wu
Univ. of Hong Kong



Henry Chen
Chinese Univ. of Hong Kong



Haitham Hassanieh
EPFL - Switzerland



Yasamin Mostofi
UC - Santa Barbara



Sandeep Rao
Texas Instruments



Beibei Wang
Origin AI, Inc.

Key Elements & Insights

- ✔ Wireless Sensing Primer
- ✔ With Signal Proc. & Deep Learning
- ✔ Wi-Fi & mmWave Sensing
- ✔ Hands-on Labs & Datasets

MULTI-AGENT OPTIMIZATION AND LEARNING

Come to learn the theories, algorithms, and applications from leading researchers and earn **CEUs/PDHs** certificates



Stefan Vlaski
Imperial College London



Ali H. Sayed
EPFL - Switzerland

Course Topics

- ✔ Foundations & Federated Learning
- ✔ Distributed Optimization
- ✔ Learning over Graphs
- ✔ Hands-on Labs Practices



Renew Membership & Recruit New Members



Accessible pricing for our growing membership to
Developing Nations, Low-Income Economies and Students

Essential Membership	Preferred Membership	Developing Nations	Low Income Economies
US\$22 /year	US\$39 /year	US\$11 /year	US\$4 /year

- Low membership fee for **student** and **graduate student members**
- Visit the IEEE website for [list of eligible countries](#); Discounted Society pricing available only to IEEE electronic members on Society *essential package*



Benefits for SPS Members

- ▶ **Build** your professional network, receive **recognition**, and **advance your career**
- ▶ **Amplify** and **Be part of** signal processing R&D, mission & impact
- ▶ *IEEE Signal Processing Magazine*
- ▶ Access to the info. and experts of the latest signal processing research & technologies
- ▶ Discounts on SPS conferences
- ▶ Access to SPS continuing education materials
- ▶ Mentoring program, networking, and professional development events
- ▶ Scholarship, grants, and resources for **students, young professionals, women, practitioners**, etc.





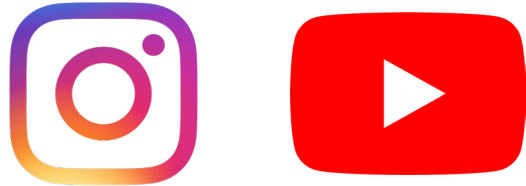
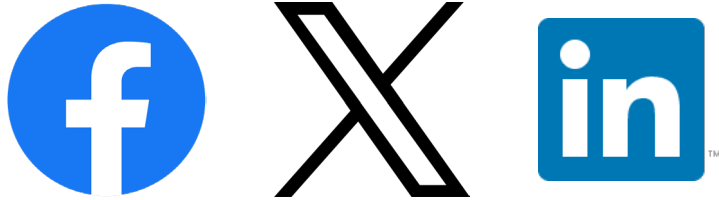
June 2
spsday.ieee.org



- ▶ Celebrating the **SPS Birthday** → Formed **2 June 1948**
 - **Global celebrations** since '23 inaugural for SPS impact, history, and communities by members/chapters
- ▶ Organize SPS Day event for 2024 around you
 - Hold events **two weeks** before/after 2 June tagged **#SPSDay**
 - Submit pictures of your event in the SPS-Day Photo Contest



Stay in touch with SPS



[@ieeeSPS](https://www.instagram.com/ieeeSPS)

Share your experience using the conference hashtag:

#ICASSP2024

Follow [@ieeeICASSP](https://www.facebook.com/ieeeICASSP) on Facebook and Twitter for more news about ICASSP 2024 and beyond!

SPS ExCom 2024: Looking Forward to Serving You



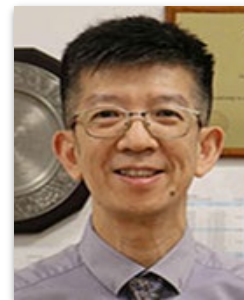
Min Wu
President



Kostas N. Plataniotis
President-Elect



Alle-Jan van der Veen
*Vice President-
Technical Directions*



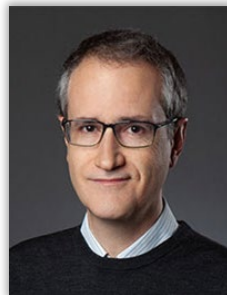
Haizhou Li
Vice President-Conferences



Roxana Saint-Nom
Vice President-Education



Kenneth Lam
Vice President-Membership



Antonio Ortega
Vice President-Publications



Rich Baseil
Executive Director



Thank you!
Enjoy your time at
ICASSP 2024 !

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President, IEEE Signal Processing Society

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