

Candidate Information Template

CANDIDATE NAME

Ayoung Kim

CANDIDATE EMAIL ADDRESS

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CANDIDATE AFFILIATION AND ADDRESS

Seoul National University
1 Gwanak ro, Gwanak gu, Seoul, South Korea

IEEE MEMBER NUMBER

90575930

COUNTRY OF RESIDENCE

South Korea

HOW WOULD YOU CATEGORIZE YOUR CURRENT ORGANIZATION?

- ☐ Government
- ☒ Academia (v)
- ☐ Industry
- ☐ Retired
- ☐ Other

POSITION SOUGHT

IEEE Robotics & Automation Society (RAS) Administrative Committee (AdCom)

BIOGRAPHY

Please provide a biographical statement exclusive of your IEEE activities. (150 words maximum)

Ayoung Kim is a Professor in the Department of Mechanical Engineering at Seoul National University (SNU), where she leads the Robust Perception for Mobile Robotics (RPM) Lab. Her research focuses on perceptual robotics, SLAM, state estimation, and spatial representation learning across diverse sensor modalities, including LiDAR, radar, thermal infrared, and vision. She is a co-editor of the forthcoming SLAM Handbook, a comprehensive reference for the field.

She received her B.S. and M.S. in Mechanical Engineering from SNU, and her M.S. in Electrical Engineering and Ph.D. in Mechanical Engineering from the University of Michigan, Ann Arbor. Before joining SNU in 2021, she was a professor at KAIST (2014–2021), and has held visiting positions at the Oxford Robotics Institute and the Boston Dynamics AI Institute.

IEEE ACTIVITIES

Please list your IEEE positions with dates of service.

Workshop Chair, ICRA, 2027.
General Co-chair, SSRR, 2026.
Video and Media Chair, IROS, 2025.
Associate VP, IEEE RAS MAB, 2022–2023.
Chapter Vice Chair, IEEE Oceanic Engineering Society Korea Chapter, 2019–present.
IROS ICROS Best Application Paper Award Committee, 2019–2022.
Senior Program Committee, IROS, 2020, 2023.
Publication Chair, IEEE Underwater Technology, 2017.
Senior Editor, RA-L, 2025–2028.
Associate Editor, T-RO, 2020–2023.
Associate Editor, RA-L, 2019–2021.
Senior Editor, IEEE Ubiquitous Robots (UR), 2020–2022.
Associate Editor, IROS, 2020, 2022.
Reviewer for T-RO, T-Mech, T-IE, RA-L, IROS, ICRA, ITSC, CVPR.

QUALIFICATIONS

What are your qualifications for this position? i.e., what makes you an ideal candidate for this position?

My qualifications for this position come from a combination of research experience, active IEEE service, and strong commitment to community. Throughout my career, I have worked across mechanical engineering, electrical engineering, marine robotics, autonomous systems, and AI-based perception, which has allowed me to collaborate with researchers from diverse technical communities and understand the broad needs of RAS members.

I have actively contributed to IEEE through leadership and service roles including Associate VP of IEEE RAS Member Activities Board (2022–2023), Chapter Vice Chair of the IEEE OES Korea Chapter (2019–present), and editorial positions for RA-L and T-RO. I have also served in organizing and program committee roles for major IEEE conferences including ICRA, IROS, and SSRR. These experiences have given me practical understanding of member engagement, publications, conferences, and technical activities within IEEE RAS.

MAJOR ACCOMPLISHMENTS

List the major contribution(s) (up to five) you have brought to IEEE in your previous assignments. If you have not volunteered for IEEE before, list relevant contributions you have made with other organizations or in related work experience.

Senior Editor, RA-L (2025–2028)
Associate Editor, T-RO (2020–2023)
Associate VP, IEEE RAS MAB (2022–2023), supporting education, mentoring, and diversity initiatives through IEEE Women in Engineering (WIE) and Young Professionals (YP) activities.
Vice Chair, IEEE Oceanic Engineering Society Korea Chapter (2019–present)
Organized and actively participated at flagship workshops at ICRA and IROS

POSITION STATEMENT

If elected to the position, what are your plans and how will they help support the mission of IEEE RAS?

If elected to the Administrative Committee of the IEEE Robotics and Automation Society, I would like to focus on strengthening interdisciplinary collaboration, education, and global community engagement in robotics and AI. Robotics is rapidly evolving through advances in artificial intelligence, foundation models, and large-scale autonomous systems, and I believe RAS should continue helping members adapt to these changes through accessible technical activities, mentoring, and knowledge sharing.

Based on my experiences in IEEE leadership, editorial service, and conference organization, I have seen how workshops, tutorials, and community-driven activities can strongly support students and early-career researchers. I would like to encourage more interactive educational programs, mentorship opportunities, and cross-disciplinary collaborations that connect robotics with AI, computer vision, transportation, marine robotics, and other emerging areas. In particular, flagship conferences such as ICRA and IROS can continue serving as important platforms for technical exchange and professional growth.

I also strongly value diversity, inclusion, and international participation within RAS. Through activities in IEEE Women in Engineering (WIE), Young Professionals (YP), and regional chapters, I hope to support broader participation from students, young professionals, and underrepresented communities worldwide. I believe RAS can further strengthen its role not only as a leading technical society, but also as a welcoming and collaborative global community for the next generation of robotics researchers and engineers.

COMMITMENT TO SERVICE

I, Ayoung Kim, hereby certify that if elected, I will serve in the position to which I am elected for the term of the office.