Forging a Collaborative Future: IEEE SMC Singapore Chapter Welcomes the SMC Society President-Elect

by Yan Wu, Chair of SMC Singapore Chapter

The IEEE Systems, Man, and Cybernetics Singapore Chapter was honoured to welcome once again President-Elect Prof. Saeid Nahavandi on his visit to Singapore on 21-22 August 2025, reinforcing our chapter's strong ties in autonomous systems research. Accompanied by Dr Yan Wu, Chair of SMC Singapore Chapter during his visit, Prof. Nahavandi delivered an Emerging Frontiers Talk at A*STAR, held strategic R&D and Society collaboration discussions at A*STAR's Institute for Infocomm Research (A*STAR I^2R), and headlined the IEEE SMC Distinguished Lecture at Nanyang Technological University (NTU).

Emerging Frontiers Talk Series at A*STAR

On 21 August 2025, Prof. Nahavandi began his Singapore visit by delivering the Emerging Frontiers Talk entitled "AI-based Convoying of Leader–Follower Autonomous Vehicles" in A*STAR. This talk was chaired by Dr Yan Wu, who is also the Deputy Head of A*STAR I^2R's Robotics and Autonomous Systems (RAS) Division and A*STAR's Director of Graduate Affairs.

Over 50 attendees, including I^2R researchers, postgraduate students, and industry partners, traced the evolution of convoy control—from bilateral robot coordination to human-on-the-loop frameworks and fully autonomous platooning. Prof. Nahavandi detailed the hardware–software co-design: mechatronic steering and actuation modules paired with data-driven learning algorithms for real-time path planning and obstacle intention prediction. A lively Q&A session delved into sensor fusion challenges, reliability benchmarks, and regulatory integration, reinforcing the importance of cross-disciplinary collaboration.

Strategic Engagement at A*STAR I^2R

Following the talk, Prof. Nahavandi held in-depth discussions at A*STAR I^2R and its RAS Division. Prof. Nahavandi met with Dr Sun Sumei, Executive Director of A*STAR I^2R to explore potential joint projects in AI-driven control systems, sensor integration for dexterous manipulation, and human-aware autonomy. A lab tour showcased ongoing work on multimodal tactile sensors and haptic intelligence, laying the groundwork for proof-of-concept trials in urban environments.

A dedicated session examined collaboration with the IEEE Systems, Man, and Cybernetics Society: strategies to co-host SMC and cross-society events, leverage the Society's regional network for knowledge exchange, and align on standardization efforts for sensor benchmarking and human-aware control. The dialogue highlighted pathways to formalise collaborations in 2026 and beyond.

IEEE SMC Distinguished Lecture at NTU

On 22 August 2025, the NTU School of Mechanical and Aerospace Engineering inaugurated its 2025 Speaker Series with Prof. Nahavandi's IEEE SMC Distinguished Lecture.

Chaired by Prof. Mir Feroskhan and attended by 60 faculty, researchers, and graduate students, the session outlined a unified architecture for autonomous vehicle convoys that safeguards vulnerable road users through advanced object detection and intention forecasting.

Case studies from field trials illustrated both technical feasibility and operational hurdles, prompting discussion on public trust, safety validation, and scalable deployment strategies.

The lecture concluded with an informal high-tea networking session, where participants forged new connections spanning hardware prototyping, AI algorithm design, and human–machine interface research.

Looking Ahead

Building on Prof. Nahavandi's visit, our Chapter will pilot and then formalise a series of collaborative initiatives, forging partnerships in the Society and across multiple IEEE societies.

As the recipient of the IEEE SMC Outstanding Chapter Award 2024, IEEE SMC Singapore continues to elevate event excellence and cultivate pioneering partnerships across the global SMC community. Stay tuned for forthcoming events and new opportunities to connect and engage with IEEE SMC Singapore.