

KEYNOTE/PLENARY

Title:

AI for Wi-Fi and Wi-Fi for AI

Speaker:

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Abstract

Artificial Intelligence and Machine Learning are drastically changing the way we live, work, play and learn. As IEEE 802.11bn—what will eventually become Wi-Fi 8—nears completion, various IEEE 802.11 study groups and standing committees are already exploring ideas around the next wireless standard and AI is expected to play a major role.

AI has the potential to help solve many existing challenges for wireless networks such as reducing co-channel interference, improving channel access and enhancing security. And as AI workloads move to the edge, there is also a need to improve how wireless networks can support their specific requirements, such as even faster and more seamless roaming, further reducing latency to better support time sensitive networking, and leveraging multi-AP coordination across disparate networks.

This session will explore the requirements to solve both sides of the equation—AI for Wi-Fi and Wi-Fi for AI—with the aim to explore potential avenues of research.

Biography



Mark has over 30 years of experience across Wireless and Security technologies and is currently helping customers implement their Wireless First strategies with Wi-Fi 7 and WPA3.

He is actively working with regulators around the region on the need to open the 6 GHz band for unlicensed use. His other areas of focus include OpenRoaming and the intersection of Wi-Fi and 5G, with a particular interest in industrial use cases.

Mark joined Cisco in 2001, as part of the Radiata acquisition, where he was Director of Software Engineering and contributed to the development of the world's first 802.11a chipset. As part of Cisco's Wireless Networking Business Unit, Mark led Software Engineering in Sydney and was responsible for the design and development of such technologies as EAP-FAST (IETF RFC 4851) and Management Frame Protection (802.11w).

Prior to his involvement in Wireless, Mark focused on Intrusion Detection and the application of Public Key Infrastructure (PKI) to secure networking protocols and services at BBN Technologies.

Through his engineering work, Mark holds 18 patents in wireless and security domains.

Mark received his Master of Engineering Science in Electrical Engineering from the University of NSW in Sydney, Australia, and a Bachelor of Science in Electrical Engineering from Tufts University in Boston, Massachusetts, where he graduated magna cum laude.