

TUTORIAL SESSION – TUESDAY NOVEMBER 15, 2022

SESSION 1

7:30 PM-8:50 PM BANGKOK TIME

ROOM ASSIGNMENT & WEBEX LINK TO BE POSTED CLOSER TO SESSION DATE

TITLE OF TUTORIAL: Wi-Fi Meets ML: Re-thinking Next-generation Wi-Fi Networks

NAME OF PRESENTERS, THEIR AFFILIATIONS AND CONTACT INFO:

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ABSTRACT:

This tutorial introduces the key Artificial Intelligence/Machine Learning (AI/ML) concepts that are essential to understanding the application of AI/ML, concisely presenting the basics of Supervised Learning, Unsupervised Learning, and Reinforcement Learning techniques. We also describe network architectural aspects to support ML, such as centralized and distributed model training and deployment. The second part of the tutorial describes representative use cases where AI/ML techniques are used to improve IEEE 802.11 performance, covering several examples in detail. Finally, to end the tutorial, we discuss a list of open challenges to adopting AI/ML in IEEE 802.11.