

# CONVERGED AI FOR IOT AND NETWORK EDGE



## Converged AI for IoT and Network Edge

The evolution of software-defined network functions, Edge computing, and IoT fuel the convergence of network functions, IoT, and edge services at the edge, applying a microservices-based deployment model adapting the cloud-native approach to an edge-native approach. In this ecosystem, AI is currently enabling several intelligent services for IoT and Enterprises and is expanding to the network functions intelligence for automation and reduced OPEX. So, now, AI provides the means for intelligent services and intelligent network functions. The next evolution will be the Converged AI or Universal AI with universal capabilities to simultaneously enable intelligent network functions and services. Besides AI-based services and network functions automation, Converged AI will enable:

- Intelligent distribution of edge computing functions
- Intelligent orchestration for network functions and services functions
- Intelligent services composition
- Intelligent resources allocation to the converged network and service workload
- Intelligent power optimization to enable sustainable edge
- Intelligent workload management to support multi-tenant applications and services and make intelligent decisions on data storage.

This talk presents the converged AI ecosystem, technology enablers, related standards, and opportunities for disruptive services.

### Bio Hassnaa

Hassnaa Moustafa, is a Principal Engineer at Intel Corporation currently working on Edge Computing and AI solutions across IoT segments and network edge infrastructure. Previously at Intel, Hassnaa led Car-to-Cloud solutions for connected/autonomous vehicles, and connectivity technologies across IoT segments.

Before joining Intel, Hassnaa was a Senior R&D engineer at Orange in France, where she contributed to wireless network solutions for EMEA region and led engineering efforts on video and multimedia services optimization over wireless networks.

Hassnaa is a senior member of IEEE, and she has over 80 publications in international conferences, journals, and books and over 100 filed patents (60+ issued). Hassnaa obtained her Ph.D. in Wireless and Mobile Networks from Telecom Paris Tech and her master's degree in distributed systems from the University of Paris XI. She also holds a research director qualification from the University of Paris XI.