

Keynote: ‘Embedded France’ and related CPS Initiatives in France

Cédric Demeure (Thales, F)

Abstract

Digital transformation is everywhere and transforming our world. Embedded systems are incorporated in increasing number of products and systems surrounding us spanning from the Internet of Things (IoT) to Industry 4.0, or aerospace. The connectivity of Cyber Physical Systems (CPS), through for example the Internet and other intelligent mechanisms has dramatically increased the adaptability, autonomy, efficiency, functionality, reliability, safety, and usability of these systems in all sectors of activities.

The association ‘Embedded France’ was created in 2013 to help all the actors to cope with this increasing complexity. Founded by four regional clusters, and also by the professional syndicate Syntec Numérique and the association Captronic (whose aim is to help SMEs to embrace electronic and software technologies).

Embedded France is the organizer of a yearly event called the “Assises de l’Embarqué”, a dedicated moment for the French embedded eco-system to meet and network. “Embedded France” has five working groups currently on-going, plus two new ones in discussion. One major outcome is the Smart Safe and Secure Platform (S3P) project, started in 2015, aiming at providing complete solutions for embedded product design.

Recently, a CPS initiative has been started in France, to set up a roadmap addressing this fast evolving CPS development and to tackle also these more complex issues such as sensor-based communication-enabled autonomous systems. This initiative proposed within the frame of Embedded France should allow for a large project to start in 2018 within the frame of the French PIA3 program.

Curriculum Vitae



Cédric Demeure is VP Thales Research & Technology France, in charge of the corporate research center located in Palaiseau. This center is dedicated to advanced studies in materials, physics, electronic components, optics and information sciences and technologies. He obtained a PhD in Signal processing from the University of Colorado in 1988 after an Engineer diploma from the Ecole Nationale Supérieure des Télécommunications. He is working for Thales since 1990, and is a Fellow Expert for Thales in digital processing.

He is the president of Embedded France, an association representing French industrial actors, providers and integrators of embedded systems and software, as well as representative clusters and professional associations.