

**Keynote Speaker:****Catalin Negrea, Ph. D.**

Lead Engineer \ Virtual Prototyping

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Title of presentation:

**Challenges of Embedded DDR Memory Interface Integration for the Automotive Industry**

Catalin Negrea (born 1985) is the initiator and coordinator of a virtual prototyping team within Continental Automotive Romania, focused on the development of high-end design solutions for interior HMI and driver monitoring. In 2013 he was nominated as a company level expert in the field of signal and power integrity. He obtained a Ph. D. degree from Politehnica University of Bucharest in 2013, with a thesis focused on multidisciplinary modeling and electro-thermal simulation of semiconductor devices. Catalin has organized several workshops on the topic on high-speed design and is a strong advocate of the concept “simulation-driven design flow”. He has provided several talks at conferences and engineering simulation user meetings on the importance of virtual prototyping and concurrent engineering. Starting from 2015 he is also coordinating TIEplus, a student contest focused on the signal integrity simulation of high-speed interfaces. Catalin is the author of more than 20 scientific papers in the fields of thermal management and signal integrity. His current research activities are focused on infrared LED multi-domain modeling and signal-power integrity co-simulation.