**What are Cyber-Physical Systems? In what sense are they different from Embedded Systems?**

Lee and Seshia(1) describe a Cyber-Physical System as an interaction with the cyber and the physical parts. It usually contains of embedded computer(s) for computation and some kind of monitor to observe the physical process. To integrate them together a feedback is necessary where the computations affect the physical parts and vice versa.

For us a cyber-physical system is the whole package with embedded systems as computational power and with physical components, which interact together. Mean while the embedded system is only used for computational.

We have an example, the Segway. The Segway is a cyber-physical system. The embedded system makes the Segway work even thou physically it should not be possible. Together with the embedded system with the physical components it works.

(1) Edward A. Lee and Sanjit A. Seshia, [*Introduction to Embedded Systems, A Cyber-Physical Systems Approach*](http://leeseshia.org/index.html), Second Edition, MIT Press, ISBN 978-0-262-53381-2, 2017. Page 1