# CPS-Ed 2014 Cyber-Physical Systems Education Workshop
## - November 4th, 2014, UC Berkeley

# Workshop background and driver

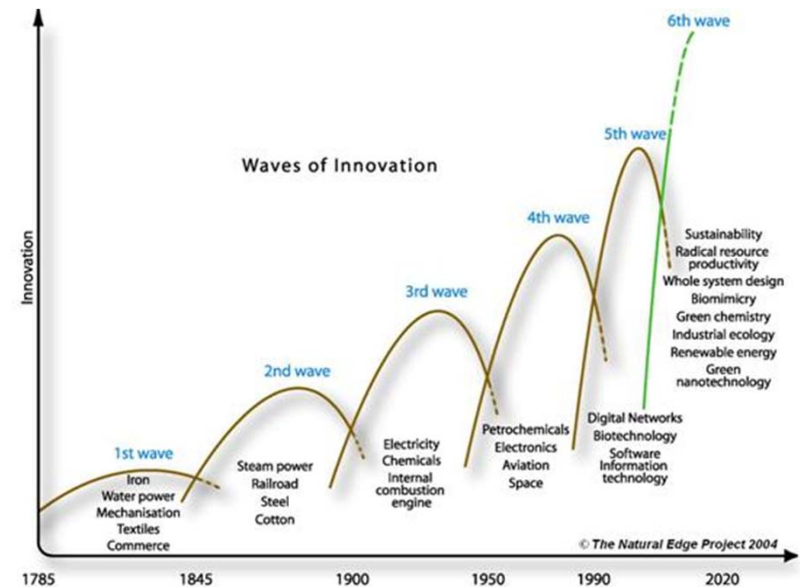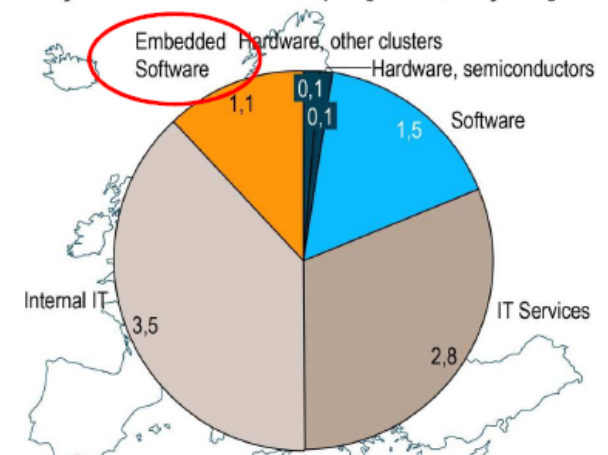Increasing importance of education and training

10th Workshop on Embedded and Cyber-Physical Systems at ESWeek 2014

CPS-ED at CPSWeek 2013

EIT ICT Labs CPS summerschool and curriculum workshops



Direct job creation – Europe [2012, m jobs]



Waves of Innovation

# Approach of CPS curriculum in ICT Labs

Didactic analysis

State of the art analysis

Synthesis of curriculum guidelines

Recommendations for further work

**State of the art**
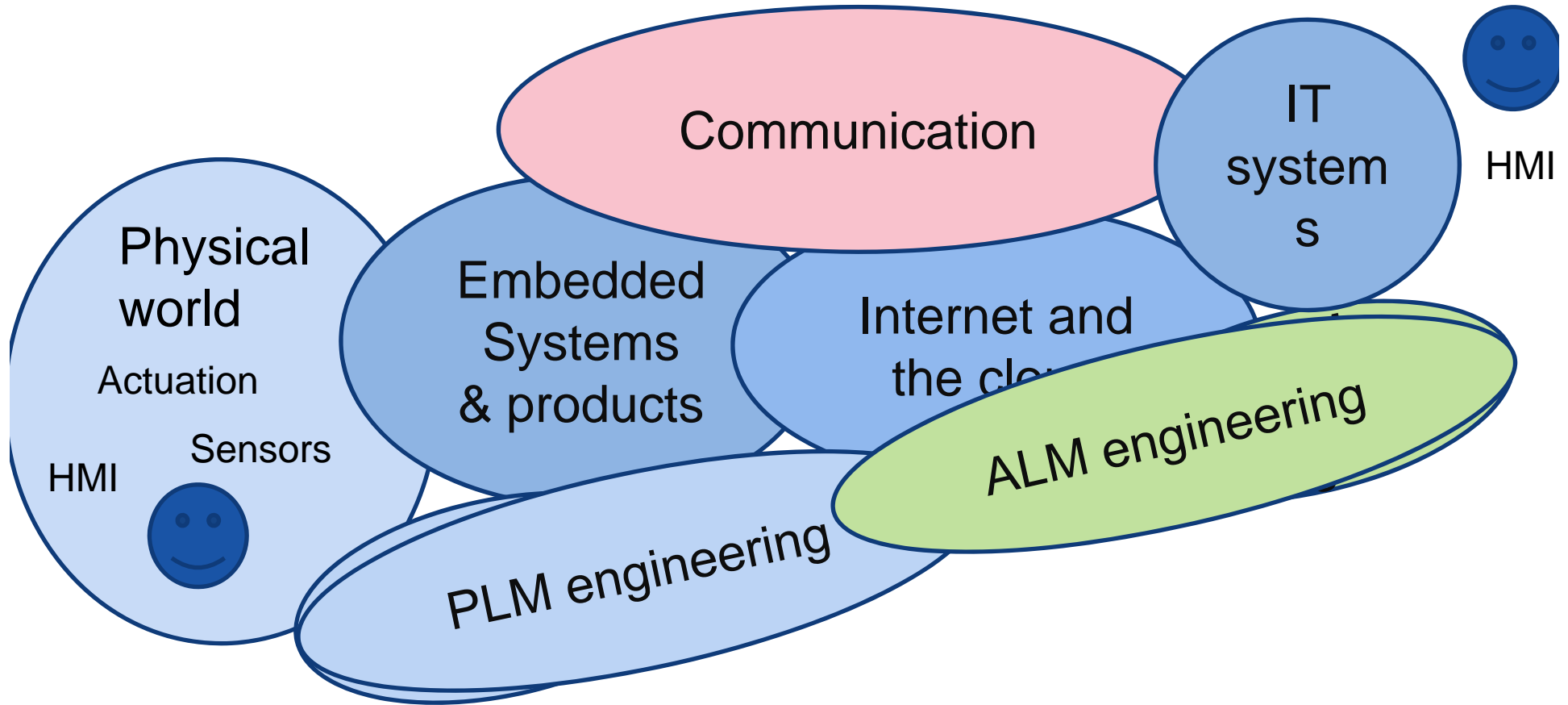
Trends and best practices
Engineering education
CPS education
CPS agendas (CyPhERS)

**Expert workshops and interactions**

- WESE at CPSWeek 2(
- Industrial meetings
- National workshops
- Meetings with leading universities

# Merging technological areas

**Workshop questions**

What skills and capabilities are required by the CPS engineers of tomorrow?

How should the corresponding programs and courses be formed?

Further collaboration and actions to promote CPS education?

# CPS-Ed 2014 program

09:00-09-10: Introduction and welcome

09:10-10.25:  Academic state of the art and industrial needs in CPS education and beyond

- Alberto Sangiovanni-Vincentelli
- Jyo Deshmukh, Totyota Research
- David Auslander, UCB / ME graduate school

Coffee

10:45-12.00

- Jeff Jensen, NI
- Raja Sengupta, UCB / CEE
- Sanjit Seshia, UCB /EECS

Lunch (12-13)

13:00-13.50:  Academic state of the art and industrial needs in CPS education and beyond, continued

- Ruzena Bajcsy, UCB / EECS
- Alessandro Pinto, UTC Research

Coffee

14:10-15:00  CPSE education at KTH and in Europe – now and future

- Martin Edin Grimheden, KTH / Mechatronics
- Martin Törngren, KTH / Mechatronics

15:00-15:45: Discussion

15:45: Workshop ends   -  followed by Dreams seminar!