

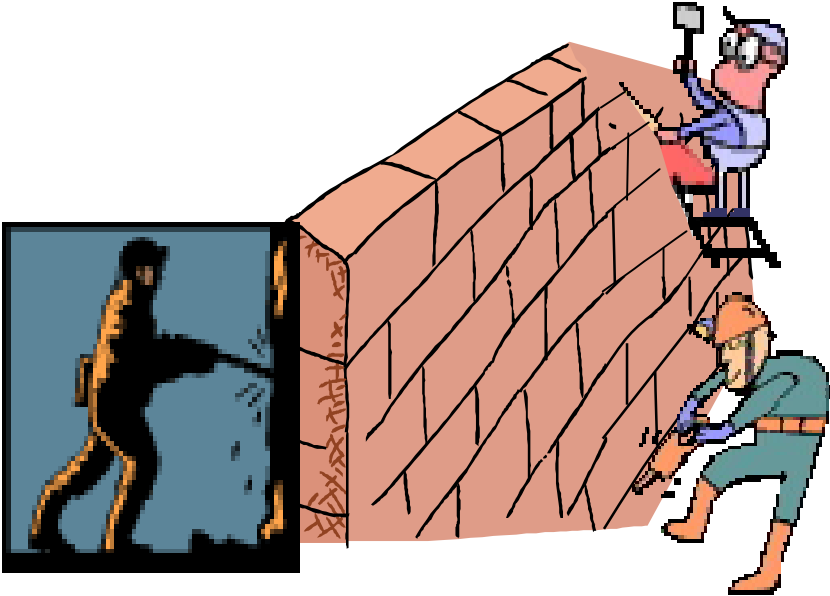
8th Workshop on Embedded and Cyber- Physical Systems Education WESE

Tampere, Finland
Oct. 11th, 2012

ES education requires tearing down the wall between CS and EE

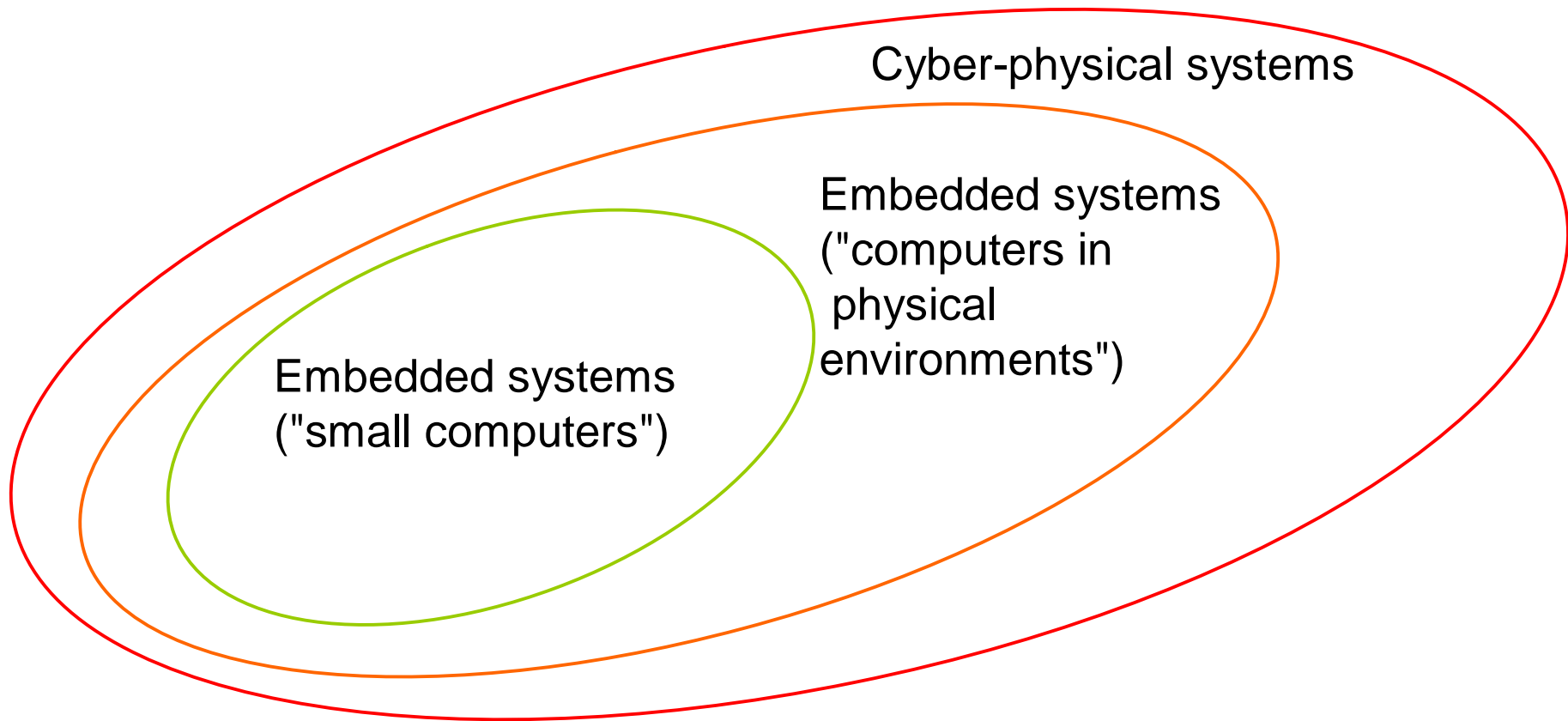
CS

EE



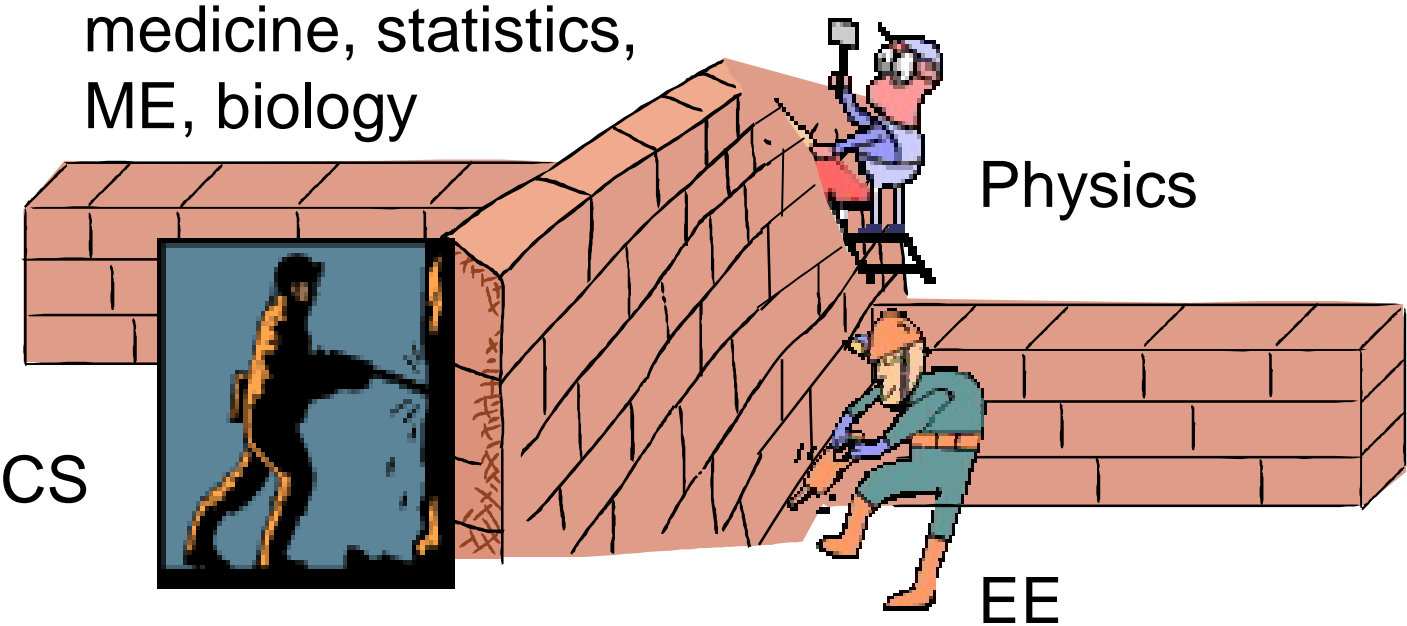
Cyber-physical systems and embedded systems

CPS = ES + physical environment



☞ CPS education comprises ES education; challenges!

CPS education requires tearing down the walls between more disciplines



Past, present and future

- 1st WESE 2005: Jersey City, US, see [//www.lulu.com](http://www.lulu.com)
- 2nd WESE 2006: Seoul, Korea, see [//www.lulu.com](http://www.lulu.com)
- 3rd WESE 2007: Salzburg, Austria, see [//www.lulu.com](http://www.lulu.com)
- 4th WESE 2008: Atlanta, see [//www.lulu.com](http://www.lulu.com)
- 5th WESE 2009: Grenoble, see ACM digital library
- 6th WESE 2010: Scottsdale, see ACM digital library
- 7th WESE 2011: Taipei, see ACM digital library
- 8th WESE 2012: to take place during ESWEEK at Tampere on Oct. 12th, ACM digital library
- 9th WESE 2013: Montreal, Canada, 10/3/2013

Committee

Organizers

Peter Marwedel, TU Dortmund, D

Jeff Jackson, The University of Alabama, USA

Kenneth Ricks, The University of Alabama, USA

International Program Committee

Seta Bogosyan, University of Alaska, Fairbanks, USA

Alex Dean, North Carolina State University, USA

Tei-Wei Kuo, National Taiwan University, Taipeh, Taiwan

Sin Ming Loo, Boise State University, USA

Jogesh Muppala, Hong Kong University of Science and Technology

Falk Salewski, Lacroix Electronic, D

Mariagiovanna Sami, U. Lugano, CH

Jonathan Sprinkle, University of Arizona, Tucson, USA

Stewart Tansley, Microsoft Corp., USA

Shiao-Li Tsao, National Chiao Tung University, Hsinchu, Taiwan

Martin Törngren, Royal Institute of Technology, Sweden

Cooperating societies

- In cooperation with ACM SIGBED
- In cooperation with EMSIG (follow-up of Artist NoE)



- Indirectly with the parent of EMSIG, EDAA



Programme

08:30 Registration & get-together, coffee

09:30 Opening

09:45 Invited Keynote: Jeff C. Jensen, Edward A. Lee, Sanjit A. Seshia (UC Berkeley, USA):
Teaching Embedded Systems the Berkeley Way

10:30 Dorsa Sadigh, Sanjit A. Seshia, Mona Gupta (UC Berkeley, USA):
Automating Exercise Generation: A Step towards Meeting the MOOC Challenge for Embedded Systems

11:00 Kerstin Bauer, Klaus Schneider (U. Kaiserslautern, D):
Teaching Cyber-Physical Systems: A Programming Approach

11:30 Lunch

13:00 Seiko Akayama, Shin Kuboaki, Kenji Hisazumi, Takao Futagami, Teruaki Kitasuka (Kyushu U., Afrel Corp., Toyo Corp., Kumamoto U., Japan):
Development of a Modeling Education Program for Novices using Model-Driven Development

13:30 Gu-Min Jeong, Dong-Byeong Kang, Sung-Soo Lim, Nikil Dutt (Kookmin U., Korea; UC Irvine, USA): An Advanced Course Design for Mobile Embedded Software through Android Programming

Programme

- 14:00 Steffen Jaschke, Steffen Büchner, Sigrid Schubert, Andre Schäfer, Rainer Brück (U. Siegen, D): Competence Oriented Embedded Systems Course for Computer Science Students
- 14:30 Andrew Nelson, Anca Molnos, Ashkan Beyranvand Nejad, Davit Mirzoyan, Sorin Cotofana, Kees Goossens (Delft UT, Eindhoven UT, NL): Embedded Computer Architecture Laboratory: A Hands-on Experience Programming Embedded Systems with Resource and Energy Constraints
- 15:00 Break
- 15:30 David C. Dyer, Yan Lin Aung (Nanyang TU, Singapore): Microprocessor-based Systems Design Teaching Platform for Undergraduate Students in Computer Engineering
- 16:00 Bailey Miller, Frank Vahid, Tony Givargis (UC Riverside, USA): RIOS: A Lightweight Task Scheduler for Embedded Systems
- 16:30 Discussion: Embedded and Cyber-Physical Systems Education in the Age of Online-Learning
- 17:00 Wrap-up
- 17:30 Close