

# Workshop on Embedded Systems Education (WESE)

Taipei 2011





# Embedded System Design

- Difficult, requires skills from various areas
- How to teach this area?



## This year ...

- All contributions go into ACM DL, directly
- Focus on programmes in the morning, on courses in the afternoon



## Programme

- 08:30 Opening
- 08:40 Keynote: Tien-Fu Chen (National Chiao Tung University Chair, 4C Electronics (4C) Education Consortium, Intelligent Electronics (IE) Education Program, Ministry of Education, Taiwan): Embedded System Education in Taiwan: Past and Future
- 09:30 Break
- 09:30 Bastian Haetzer, Gert Schley, Rauf Salimi Khaligh, Martin Radetzki (Univ. Stuttgart, Germany): Practical Embedded Systems Engineering Syllabus for Graduate Students with Multidisciplinary Backgrounds
- 10:30 Peter Marwedel, Michael Engel (TU Dortmund, Germany):
  Embedded System Design 2.0: Rationale Behind a Textbook
  Revision
- 11:00 Steffen Jaschke, Sigrid Schubert, André Schäfer, Rainer Brück (Univ. Siegen, Germany), Bruno Kleinert. Harald Schmidt, Dietmar Fey (Univ. Erlangen-Nürnberg, Germany): Competence Research: Teaching Embedded Micro/Nano Systems
- 11:30 Discussion: How should embedded system curricula be updated to reflect Systems Engineering?
- 12:00 Lunch

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## Programme

- 13:00 Pangfeng Liu (NTU, Taipei, Taiwan), Greg C. Lee (NTNU, Taipei, Taiwan), Jenq-Kuen Lee and Cheng-Yen Lin (NTHU, Hsinchu, Taiwan) Innovative System and Application Curriculum on Multicore Systems
- 13:30 Jogesh Muppala (Hong Kong University of Science and Technology, Hong Kong): Teaching Embedded Software Concepts Using Android
- 14:00 Shuvra S. Bhattacharyya, William Plishker, Chung-Ching Shen, Ayush Gupta (Univ. of Maryland, USA): Teaching Cross-Platform Design and Testing Methods for Embedded Systems using DICE
- 14:30 Discussion: How to teach the design of embedded multi-core software?
- 15:00 Akash Kumar (NUS, Singapore), Shakith Fernando (TU Eindhoven, Netherlands), Manmohan Manoharan (NUS, Singapore): Bringing Soccer to the Field of Real-Time Embedded Systems Education
- 15:30 Break
- 16:00 Discussion: What have we learned today?
- 16:30 Close



## Support

- The support by the ArtistDesign network of excellence is acknowledged.
- Information available via http://www.artist-embedded.org/artist/-WESE-2011.html
- Slides can be stored on the web site
- Requires attendees to be listed in ArtistDesign review



## Programme Committee

- Alex Dean, North Carolina State University, US
- Yann-Hang Lee, Arizona State University, USA
- Sin Ming Loo, Boise State University, USA
- Jogesh K. Muppala, Hong Kong U. of Science and Technology, HK
- Mariagiovanna Sami, ALARI, Lugano, CH
- Chi-Sheng (Daniel) Shih, National Taiwan U., TW
- Stewart Tansley, Microsoft Corporation, USA
- Martin Törngren, Royal Institute of Technology, SE
- Shiao-Li Tsao, National Chiao Tung University, TW
- Frank Vahid, UC Riverside, USA
- Marilyn Wolf, Georgia Tech, USA



## Organizers

- Peter Marwedel, TU Dortmund, Germany
- Jeff Jackson,
   The University of Alabama, USA
- Kenneth Ricks,
   The University of Alabama, USA