CISTER Quicknews

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progress in projects

INDUSTRY EXPERTS GATHER IN PORTO FOR P-SOCRATES INDUSTRIAL WORKSHOP

The P-SOCRATES Industrial Workshop took place at ISEP in November, a meeting organized to present the results of the P-SOCRATES European project to its Industrial Advisory Board, which includes experts from Kalray (FR), Airbus (FR), Rapita (UK), Honeywell (CZ), SAAB (SE), MBDA (IT) and Bosch (DE). P-SOCRATES (Parallel Software Framework for Time-Critical Many-core Systems) is an FP7 European project, led by ISEP, addressing the challenges of predictability and performance of current and future applications with high-performance and real-time requirements.

The project developed an entirely new design framework, from conceptual design of the system functionality to its physical implementation, to facilitate the deployment of standardized parallel architectures in all kinds of real-time systems.

During the workshop, P-SOCRATES members presented technical outcomes of the project, as well as results of the evaluation campaign, discussing with the industry experts the achievements and future perspectives. This was a highly successful meeting and received very positive and encouraging feedback.

achievments in the academia

The 2016 IEEE Real-Time Systems Symposium (RTSS'16) successfully took place in Porto, at ISEP, from November 29 to December 2.
RTSS is the premier conference in the area of real time systems, presenting innovations in the field with respect to theory and practice. RTSS is a very competitive conference and this year had an acceptance rate of 23%. The conference was co-organized by the local arrangement chairs CISTER researcher Eduardo Tovar and Luis Almeida from IT/FEUP.

More than 160 researchers from around the world gathered to present results on real-time systems advances. The conference had an informative keynote on industrial digitalization was also given by Thomas Lagerberg from ABB. In his award speech, Krithi Ramamritham from IIT Bombay gave an interesting talk on the application of real-time thinking to real problems.

RTSS also held 5 workshops, two of which were co-chaired by CISTER researchers. Geoffrey Nelissen co-chaired the 9th International Workshop on Compositional Theory and Technology for Real-Time Embedded Systems (CRTS'16), and Luis Lino Ferreira co-organized the 4th IEEE International Workshop on Real-Time Computing and Distributed systems in Emerging Applications (REACTION'16).

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ENABLE-S3 GENERAL ASSEMBLY IN MADRID

CISTER researchers David Pereira and Gurulingesh Raravi attended the first General Assembly of the ENABLE-S3 project, that took place in Madrid in November.

ENABLE-S3 will pave the way for accelerated application of highly automated and autonomous systems in the mobility domains automotive, aerospace, rail and maritime as well as in the health care domain.
The main focus of the meeting was to help consolidate the ongoing specifications of several use-cases of the project, and associated requirement elicitation process. CISTER participates in three use-cases, namely on the automotive, aerospace, and farming application domains. During the general assembly, CISTER researchers participated in several breakout sessions dedicated to these use cases, where together with the remaining partners involved in the use cases, successfully progressed in their specifications and requirement definition towards the first version of the corresponding deliverables.

activities in the centre

CIWORK 2016

In November, CISTER organized its annual Industrial Workshop (CiWork'16). The workshop series, started in 2013, brings together researchers and practitioners from industry and academia on a joint platform to debate recent developments and challenges (and their practical aspects in industry) in the emerging topic of embedded real time systems.
The 2016 edition had a special agenda and focused on academia/industry relationships and knowledge transfer. The topics included Factory automation and control, Energy-efficient buildings, data centers and power distribution systems, healthcare systems and high-confidence medical devices, Networked cyber-physical and control systems, Avionics, automotive and robotic electronic systems and Internet of Things.
The well attended workshop had talks by Cláudio Silva (GMV), João Rodrigues (Critical Software), Luís Martins (EFACEC), Francisco Almeida Lobo (Critical Manufacturing), Marlos Silva (SONAE) and Paulo Santos (Kinematix).

VISIT OF COLLABORATOR FROM UNIVERSIDAD CARLOS III MADRID

Marisol Garcia-Valls, an associate professor at Universidad Carlos III in Madrid, Spain, visited CISTER during the months of November and December. Marisol holds a PhD in Computer Science from Universidad Politécnica de Madrid and a degree in Computer Science Engineering from Universitat Jaume I, Spain. Her research interests include reliable distributed systems, software technologies, real-time middleware for cyber-physical systems, modeling and software engineering. She has been and is enrolled in a number of National and European projects, being the scientific and technical coordinator of iLAND project (Artemis-1-00026). During her stay, Marisol explored to start a collaborative work on QoS for message-oriented middlewares with CISTER researchers.

achievments in the academia

PC MEETING OF RTAS' 17 ORGANIZED IN CISTER

December 3 saw many high-profile academics gather at CISTER for the Technical Program Committee meeting of the 23rd IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS'17). The conference will be held in Pittsburgh, USA, as part of the Cyber-Physical Systems Week (CPS Week) in April, 2017.

The annual CPS Week 2017 will bring together leading conferences, including the International Conference on Hybrid Systems (HSCC'17), the International Conference on Cyber-Physical Systems (ICCPS'17), the International Conference on Internet-of-Things Design and Implementation (IoTDI'17), the International Conference on Information Processing in Sensor Networks (IPSN'17), and RTAS'17.

Researchers Geoffrey Nelissen and Vincent Nelis participated in the PC meeting.