Newsletter

April 2019

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COEMS

Continuous Observation of Embedded Multicore Systems

Welcome to the COEMS Newsletter.
Within the COEMS project the five players, University of Lübeck, Accemic Technologies, Thales Austria and Thales Romania, Høgskulen på Vestlandet and Airbus joined their forces to develop a novel continuous observation solution for embedded multicore systems.
We would like to inform you about our achievements, current developments and COEMS-related events in the near future. To successfully complete COEMS in a future-oriented way we have been granted six months in addition. Now the project will terminate in April 2020.

COEMS Workshop @ HiPEAC Conference in Valencia

The workshop of the COEMS project took place on HiPEAC conference in Valencia on 21st of January 2019.

In four talks we presented the current state of project findings and developments and we gave the first demonstration of the COEMS hardware-based, non-intrusive, continuous observation and discussed performance and optimizations.

Talks on specification queries, data race detection, software-based tracing in the railway domain, runtime verification and real-time monitoring for correctness and robustness by the members of the project consortium and external domain experts Dr. César Sánchez from the IMDEA Software Institute in Spain and Dr. Stefan Jakšić from the Institute of Technology in Austria formed the basis for fruitful discussions.

We are proud to say that the workshop was organized as part of HiPEAC conference, which is the premier European forum for experts in computer architecture, programming models, compilers and operating systems for embedded and general-purpose systems, which gave us valuable opportunity to get feedback and communicate with experts and interested parties.

Papers & Talks

Alex Weiss gave a talk on Requirements-based Testing and Structural Coverage on the 12th of March at the Aero Testing Expo 2019 conference and exhibition, part of Aerospace Technology Week, Munich, Germany.

https://www.aerospacetechweek.com/event/aero-testing-expo

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 732016.

Accemic presented COEMS Technology at Aerospace Testing Expo

Aerospace Testing Europe as a part of the Aerospace Technology Week is the premier exhibition and conference for the aerospace testing sector. This year, it took place in Munich on March 12th-13th.

Accemic Technologies presented the latest results of the COEMS project in a talk titled “Requirements-based Testing and Structural Coverage” as part of the conference session “Meeting Testing and Certification Standards”.

In a crowded auditorium, Alexander Weiss answered a good dozen of questions from the professional community. In addition to the presentation, Accemic ran a booth at the event for the full two days. A live demonstration of the technology developed in COEMS was on display and actively presented there. Numerous international testing experts took this opportunity to learn about the advertised new monitoring method and to discuss possible applications with Thomas Preusser and Alexander Weiss.

Upcoming

Faustin Akishakye will present:
Non-intrusive MC/DC Measurement Based on Traces by Faustin Akishakye, Svetlana Jakšić, Felix D. Lange, Malte Schmitz, Volker Stolz, Daniel Thoma at TASE - the 13th International Symposium on Theoretical Aspects of Software Engineering which will take place from July 29 to August 1, 2019 in Guilin, China

http://www.se.gxnu.edu.cn/tase2019/

A tutorial on Stream-based Runtime Verification by Martin Leuker, César Sánchez, Torben Scheffel, Malte Schmitz, Volker Stolz, Daniel Thoma and Alexander Weiss will be given at FM 2019 - the 3rd World Congress on Formal Methods which will be held in from October 7 to 11, 2019 in Porto, Portugal.

http://formalmethods2019.inesctec.pt

COEMS will be presented in a workshop in the course of iFM - the 15th International Conference on Integrated Formal Methods which will take place in Bergen, Norway from December 2 to 6, 2019.

http://ifm2019.hvl.no

For more information about the project please visit the COEMS website:

www.coems.eu

Consortium:

UNIVERSITÄT ZU LÜBECK
INSTITUTE FOR SOFTWARE ENGINEERING AND PROGRAMMING LANGUAGES

ACCEMIC TECHNOLOGIES

THALES

Høgskulen på Vestlandet

AIRBUS

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