Dr. Leonidas Kosmidis, a recent PhD graduate of Barcelona Supercomputing Center, received an Honourable Mention for his outstanding PhD Dissertation titled "Enabling Caches in Probabilistic Timing Analysis" at the Eurosys 2018 Conference held in Porto. The EuroSys Roger Needham PhD Award is presented annually to the best PhD dissertation from a European Institution in the area of Systems. According to the 2018 Award Chair, Prof. Lorenzo Alvisi, this year’s edition was very competitive, resulting in a tough decision for the evaluation committee, the members of which described Kosmidis’ thesis as “highly innovative and inspiring”.

Kosmidis’ dissertation contributions converted the concept of probabilistic timing analysis in critical real-time systems from a theoretical idea into a reality applicable in industry. Specifically, he proposed hardware and software solutions that provide the required properties missing from existing critical real-time systems, so that these could be analysed with probabilistic timing analysis methods.

Kosmidis performed his doctorate studies at the CAOS group of BSC and the Computer Architecture Department of UPC, under the supervision of Dr. Eduardo Quiñones, Dr. Jaume Abella, the CAOS group leader Dr. Francisco J. Cazorla and BSC’s director Prof. Mateo Valero. His work was fundamental for the
development and success of several projects at CAOS/BSC in which he participated, such as the FP7 PROARTIS and PROXIMA and the ESA funded Proartis4Space and EFL, which helped Kosmidis’ thesis contributions to be transferred to industry, with the adoption of his hardware proposals in Cobham’s Gaisler LEON3 processor, as a pinnacle. Currently, Dr. Leonidas Kosmidis is a Senior Researcher at BSC, leading the low-level software activities for embedded processors and accelerators in the CAOS group.

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