Semi-partitioned scheduling and task migration in dataflow networks

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List of publications

Journal Articles

- **Emanuele Cannella**, Todor Stefanov, "Energy Efficient Semi-Partitioned Scheduling for Embedded Multiprocessor Streaming Systems", *In Design Automation for Embedded Systems (DAEM), vol. 20, number 3, 2016*, pp. 239–266.
- **Emanuele Cannella**, Onur Derin, Paolo Meloni, Giuseppe Tuveri, Todor Stefanov, "Adaptivity Support for MPSoCs Based on Process Migration in Polyhedral Process Networks", *In VLSI Design 2012*, pp. 987209:1-987209:17.
- Jelena Spasic, Di Liu, **Emanuele Cannella**, Todor Stefanov, "On the Improved Hard Real-Time Scheduling of Cyclo-Static Dataflow", *In ACM Transactions on Embedded Computing Systems (TECS), vol. 15, Issue 4, Article 68, Aug 2016*.
- Onur Derin, **Emanuele Cannella**, Giuseppe Tuveri, Paolo Meloni, Todor Stefanov, Leandro Fiorin, Luigi Raffo, Mariagiovanna Sami, "A system-level approach to adaptivity and fault-tolerance in NoC-based MPSoCs: The MADNESS project", *Microprocessors and Microsystems - Embedded Hardware Design, vol. 37, number 6-7, 2013*, pp. 515–529.
- Onur Derin, Prasanth Kuncheerath Ramankutty, Paolo Meloni, **Emanuele Cannella**, "Towards Self-Adaptive KPN Applications on NoC-Based MPSoCs" *In Advances in Software Engineering, 2012*, pp. 172674:1–172674:16, 2012.

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- **Emanuele Cannella**, Onur Derin, Todor Stefanov, "Middleware approaches for adaptivity of Kahn Process Networks on Networks-on-Chip", *In the Proceedings of the 2011 Conference on Design and Architectures for Signal and Image Processing, (DASIP) 2011*, pp. 100–107, Tampere, Finland, November 2-4, 2011.
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- Paolo Meloni, Giuseppe Tuveri, Luigi Raffo, **Emanuele Cannella**, Todor Stefanov, Onur Derin, Leandro Fiorin, Mariagiovanna Sami, "System Adaptivity and Fault-Tolerance in NoC-based MPSoCs: The MADNESS Project Approach", *In the Proceedings of the 15th Euromicro Conference on Digital System Design, (DSD) 2012*, pp. 517–524, Cesme, Izmir, Turkey, September 5-8, 2012.

Curriculum Vitae

Emanuele Cannella was born on August 17, 1983 in Udine, Italy. In 2008, he obtained his MSc degree in Electronic Engineering from University of Udine. His master's thesis project concerned Multiprocessor Systems-on-Chip running embedded streaming applications. He carried out this project as an exchange student at the Computer Engineering laboratory of TU Delft, The Netherlands. Shortly after his graduation, he started to work as a research assistant at University of Udine, in the field of pervasive and distributed computing. In 2010, he joined the Leiden Embedded Research Center at Leiden University as a PhD candidate. His research work, which has led to this thesis, has been funded by the EU FP7 project MADNESS. In July 2015, he joined Lely Industries, where he works as a software engineer focusing on model-driven software engineering approaches to robotic control.

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