

**ARTES++ Travel Report**  
**19th Euromicro Conference on Real-Time Systems (ECRTS'07),**  
**July 3-6 2007, Pisa (Italy)**  
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### **Motivation and Description**

The purpose of this trip was to go to the 19th Euromicro Conference on Real-Time Systems (ECRTS'07) to present a paper in the Work-In-Progress session and also to attend the tutorial on MARTE. ECRTS is forum aiming at covering state-of-the-art research and development in real-time computing including applications, infrastructure and hardware, software technologies, and system design and analysis.

This conference week started with three satellite workshops and a tutorial done in parallel sessions:

- The Worst Case Execution Time Analysis workshop (WCET 2007).
- The Real-Time Networks workshop (RTN 2007).
- The Operating Systems Platforms for Embedded Real-Time Applications (OSPERT 2007).
- The Tutorial on MARTE: A New Standard for Modeling and Analysis of Real-Time and Embedded Systems.

Then the remaining of this week was split in eight sessions:

- Scheduling and schedulability Analysis
- Multiprocessor scheduling
- Control and energy management
- Wireless network scheduling
- Timing analysis
- Quality of service management
- Scheduling in networks and multicore platforms
- Fixed-priority scheduling

The main conference was held in the Scuola Superiore Sant'Anna, located in the heart of Pisa (in Italy) and, the workshops and the tutorial were in the RETIS Lab around 20min walk from the centre of Pisa.

### **Contributions**

During the Work-In-Progress session, Séverine presented a paper entitled “*A Model-Based Framework for designing Embedded Real-Time Systems*”. This paper describes a work-in-progress which aims at getting a common definition of what real-time components are as well as having a common structure (done as a Model-Based Framework) to specify and design those real-time components.

The Work-In-Progress session ended with an hour Poster session, which gave us a very good opportunity to have useful talks and comments on our work.

## **Highlights**

As ECRTS is one of the leading conferences in Real-Time computing, many papers were very good and relevant. Among those and as our work is more focused on modeling, in our point of view, some talks were really interesting to listen to:

- The invited talk, “*From Model-Driven Development to Model-Driven Engineering*”, by Brian Selic in which he presented a state-of-the-art of the system development and the Jazz Platform, a scalable and extensible platform for collaborative development.
- The Tutorial on “MARTE: A New Standard for Modeling and Analysis of Real-Time and Embedded Systems” by Sébastien Gérard, Julio Medina and Dorina Petriu. This tutorial described in details this UML-profile which one of the main concerns addresses the modelling of time.

## **Conclusion and Personal Impression**

In our opinion, our participation to ECRTS’07 was a very positive experience. Apart from being in a full of history environment (such as the nearby Piazza dei Miracoli with the famous Leaning Tower), this conference allowed us to meet many researchers of the Real-Time community, to listen to interesting talks and to get useful feedbacks on our work.