UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA

DIPARTIMENTO DI
INFORMATICA, SISTEMISTICA E
COMUNICAZIONE

Viale Sarca, 336
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# SEMINAR ANNOUNCEMENT

**Wednesday November 27th, 2024**
**at 09:30 am**
**Room "Aula T024" - Abacus Building (U14)**

## Anticipating Software Performance Issues When and How

**Speaker**
**Prof. Catia Trubiani**
Gran Sasso Science Institute (GSSI), L'Aquila

**Abstract**
Interpreting the performance characteristics of complex software systems is not trivial, even more so when looking at specific application domains, e.g., cyber-physical systems. The goal of this talk is to present some methodologies on how to explain the performance analysis results and relate them with the system design alternatives.
One viable solution is to make use of software performance antipatterns since they are recurring solutions to common mistakes, i.e. bad practices, affecting performance. Such antipatterns can play a key role in the software performance domain, because they can be used in the detection of performance issues as well as in the formulation of solutions, i.e., different architectural options. Recent results focusing on cyber-physical systems will be presented, along with future research directions.

**Short Bio**:
Catia Trubiani is Associate Professor in Computer Science at the Gran Sasso Science Institute (GSSI), L'Aquila, Italy. Before joining the GSSI, she has been with various international research institutes like the Imperial College of London in UK, and the Karlsruhe Institute of Technology in Germany. Research interests are on quantitative modelling and analysis of interacting heterogeneous distributed systems, with a focus on performance analysis under uncertainty, software quality optimisation, and software architectures.

contact person for this Seminar: prof. Francesca Arcelli Fontana