

Curriculum vitae of Angelo Morzenti

Angelo Morzenti, born in 1960, graduates in 1985 in Electronic Engineering at Politecnico di Milano, where he also receives a PhD in Computer Science in 1989, he is assistant professor since 1991, associate professor since 1998, and full professor since 2001.

His research interests are centered on languages, methods and tools for the specification, analysis, validation, verification and design of critical, real-time, distributed, embedded computer-based systems. His main contributions in these areas include the following

- Definition of languages for modular structuring of logical specification of computer based systems adopting object oriented concepts and techniques;
- Introduction of various time scales in logical specifications;
- Axiomatic description of operational formal notations (e.g., "Merlin&Farber" Petri nets) and definition "dual language" methods for the specification and verification of real-time systems;
- Definition of concepts and methods, and construction of tools, for the generation of functional test cases starting from the descriptive specification of time- and safety-critical systems;
- Definition of original methods for implementing time critical systems by means of provably correct refinement relations;
- Definition of a unified framework for System Requirement Analysis, integrating descriptive formal notations with high-level operational notions such as events, actions, states, finite variability, cause-effect relations;
- Definition of analysis methods for logical descriptions of time-critical systems through model checking and SAT- or SMT-based bounded model checking.
- Specification, analysis and design of embedded critical systems in the field of transportation, with particular reference to railway and electric vehicles.

Over the years Angelo Morzenti participates as a principal researcher to several national and international research projects, commissioned and financed both by public bodies (by the European Commission and the Italian Research Ministry) and by private institutions and companies.

Angelo Morzenti acts on a regular basis as a reviewer for several international conferences, and for top international journals (e.g., for IEEE "Transactions on Software Engineering", ACM "Transactions on Programming Languages And Systems" and "Transactions on Software Engineering and Methodology") and for major international conferences (e.g., for International Conference on Software Engineering and European Software Engineering Conference).