

# Maura Cerioli

Associate professor

- maura.cerioli@unige.it
- **+**39 0103536731
- +39 3209227749

# Education and training

#### 1992

## Ph D in Computer Science

Relationship between Logical Frameworks

Consortium of the universities of Genova Pisa and Udine - IT

#### 1988

### **Masters Degree**

Specifiche di Tipi di Dato Astratti con Algebre Parziali - Magna cum laude University of Genova - Genova - IT

## Academic experience

#### **2000 - ONGOING**

### **Associate professor**

University of Genova - Genova - IT

### 1992 - 2000

## **Assistant professor**

University of Genova - Genova - IT

# Language skills

ItalianEnglishFrenchMother tongueProficientBasic

## Teaching activity

During my career I have held university courses at various levels:

- computer literacy for students in Law, Political Sciences, Environmental and Geological Sciences; essentially basic elements of computer architectures and operating systems, introduction to the use of office automation tools and automatic analysis of small data collections.
- basic courses in computer science for students of computer science and related disciplines, such as mathematics and statistics; among these courses on basic imperative programming, object-oriented programming, advanced aspects of programming, databases, formal methods in computer science, software engineering

• advanced courses for students of computer science MSc, focused on agile systems and evaluation of software quality.

Currently I teach Introduction to Programming (first year of the IT in the University of Genoa), in which the C ++ language is used in the Linux environment, I'm the responsible for Advanced Programming Techniques (third year of the same degree course), in which the C # language is used, in the Windows / Visual Studio environment, for the Introductory Course on Computer Science for International Diplomatic Sciences, and for Agile Development of Smart Systems for the MSc in computer science (in English)

## Research interests

My scientific interests are focused on software system development methodologies from the very beginning of my carreer. Initially, mainly from the point of view of formal methods and in particular of algebraic-logical specification techniques. In this context I developed the notion of simulation of logical systems and its application to allow the combination of specifications expressed in many languages. I have also been a preeminent member of the definition of the Common Algebraic Specification Language (http://www.cofi.info) within the CoFI initiative.

Later I became interested in the semantics of visual modeling notations and in particular of UML, their relation to more formal specification languages and their applications to software development, particularly in the case of distributed systems, such as peer to peer.

More recently I focused on issues related to the management of knowledge in the industry, participating in a project to develop a prototype tool to support self-learning and obtain information on demand based on intelligent research supported by a specific ontology.

I have also investigated into the problems related to the transfer of knowledge assisted by computer supports in the didactic field and to the evaluation of the quality of the service through questionnaires.

In the last few years I have been interested in agile development methods, the evaluation of the quality of the tests, and, more recently, the empirical approach to software engineering.

I have numerous publications related to the modeling of partiality and nondeterminism, to formal specification languages, to UML semantics, to modeling peer to peer systems both through particular UML profiles, and using CASL libraries, to the analysis of the impact of technology on the quality of teaching, quality and comprehensibility of the tests.