

Direzione Ricerca, Innovazione e Internazionalizzazione

> ID VP\_108\_INF

# Visiting Professor Program Academic Year 2025/2026

**TEACHING COMMITMENT: 12 hours** 

## **COURSE TITLE** Satisfiability Modulo Theories (SMT) for System Verification

TEACHING PERIOD Il semester

SCIENTIFIC AREA Computer Science

LANGUAGE USED TO TEACH English

#### **COURSE SUMMARY**

The course module introduces formal techniques for the verification of concurrent systems based on Satisfiability Modulo Theories (SMT) techniques. It will focus on model checking and property proving with SMT solvers. Students will gain practical experience in using tools like Z3 for analyzing real-world systems.

#### **LEARNING OBJECTIVES**

Exposing the student to SMT theory and to the tool Z3, used in research and in industry.

#### **OTHER ACTIVITIES BESIDE THE COURSE**

It is expected that the visiting professor will interact with the researchers of the Dipartimento di Informatica, and we expect him/her to give at least a talk on his/her current research

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#### VISITING PROFESSOR PROFILE

The ideal candidate is a researcher with experience in verification based on SMT techniques. Good profile of research, previous experience in teaching at the university level the topic of the course.

### **CONTACT REFERENT**

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