

CURRICULUM VITAE ET STUDIORUM

Matteo Pradella, September 2013

Matteo Pradella was born in Sondrio (Italy) on May 31, 1971, and is an associate professor at DEIB (*Dipartimento di Elettronica, Informazione e Bioingegneria*), Politecnico di Milano since March 2011.

He held a permanent research position at the IEIIT institute of the Italian National Research Council (CNR) from December 2001 to February 2011.

He received his Ph.D. in January 2001 from Politecnico di Milano, and was awarded the Chorafas Foundation Prize for his Ph.D.

In 2000, 2001, and 2002 he was first visiting Ph.D. student, then visiting researcher at the Software Engineering group (code 5546) of the Naval Research Laboratory, Washington, DC.

Matteo Pradella's research activity mainly covers two different fields: formal methods, and formal languages.

Formal methods: He works on formal models and methods for critical and distributed systems with the SW engineering group (DEEP-SE). His main research topics are integrated tools for the specification and validation of critical systems; model checking techniques; bounded model and satisfiability checking; SAT- and SMT- (Satisfiability Modulo Theory) based verification techniques in general. Since his Laurea degree he worked on the TRIO real-time logic language: e.g. its industrial application, for distributed and critical systems (TRIO-CORBA), higher order extensions and usage for describing architectures of complex systems (ArchiTRIO).

Formal languages: He works with the Formal languages and compiler group. His main research interests are: associative descriptions of programming languages; picture languages and 2D grammars and formalisms and parsing techniques; Operator-Precedence languages: grammars, automata, logics and parallel and incremental parsing techniques.

He designed and developed some GPL-licensed tools, among which the open plugin-based model/satisfiability checker Zot. Zot was supported in 2007 with a grant from Formal Methods Europe.

Pradella has a significant experience in funded research: among the others he participated in the EPSRIT project OpenDREAMS-II in 1998, in the MURST project MOSAICO in 1999, a SP4 project in 2002, in the ERC Advanced Investigator “SMScom”, started in 2008, and several PRIN projects.

In 2008 he was awarded a RSTL (“curiosity driven”) research grant from CNR as principal investigator.

Pradella teaches several courses at Politecnico di Milano, both at undergraduate and graduate levels: Algorithms and Principles of Computer Science (at the Bachelor’s level), and Principles of Programming Languages (at the Master’s level). He taught Theoretical Computer Science

from 2003 to 2010, and Algorithms and Data Structures, from 2002 to 2008. He also has been advisor or co-advisor of several among Bachelor's, Master's, and PhD theses.

Professional activity

Pradella served as a committee member to the following conferences:

29th IEEE-TCS, ACM-SIGSOFT International Conference on Software Engineering (ICSE 2007) - Research Demonstrations Track;

PDP 2014, the 22nd Euromicro International Conference on Parallel, distributed and network-based Processing, Special Session on Formal Approaches to Parallel and Distributed Systems (4PAD).

He also serves as reviewer in international journals and conferences, among which: IEEE Transaction on Software Engineering (TSE), ACM Transactions on Software Engineering and Methodology (TOSEM), Theoretical Computer Science, Science of Computer Programming, Journal of Automata, Languages and Combinatorics, RAIRO - Theoretical Informatics and Applications, Formal Aspects of Computing, ECOOP, SEPN, CC, TCS, ICSE, CIAA, LATA, DLT, FM, FASE.