

# Curriculum Vitae of Pietro Di Gianantonio

born in Gemona del Friuli (UD) Italy 26 April 1963

## Academic degrees and previous appointments

- 10/4/1987 awarded the degree "Laurea in Informatica" (110/110 cum laude). Dissertation "The Subtype Relation in the Interval Model" supervisor Prof. Giuseppe Longo;
- 10/4/1987 awarded the "Diploma di Licenza in Informatica" by the Scuola Normale Superiore in Pisa;
- 18/6/1988–20/12/1989 Academic Visitor at the Computing department of Imperial College of Science and Technology, the University of London (partially on leave of absence from the University of Pisa);
- 1989 (January) – 1993 (February) Ph.D. student in Computing at the University of Pisa;
- 10/1/1990–20/6/1989 Visitor of Liens Laboratoire de Informatique at Ecole Normale in Paris; (on leave of absence from the University of Pisa)
- 15/2/1991–31/8/2001 Ricercatore Universitario in Informatica (Assistant Professor in Computer Science) at the Department of Computer Science of the University of Udine (ITALY);
- 21/3/1994 – 20/3/1995 Research Fellow at the Laboratory for Foundations of Computer Science of the Computer Science department of the University of Edinburgh (on leave of absence from the University of Udine);
- 21/3/95 – 20/9/95 Research Fellow "Centrum voor Wiskunde en Informatica" (CWI), Amsterdam (on leave of absence from the University of Udine);
- 1/9/2001 – onwards Associate Professor at the Department of Computer Science of the University of Udine (ITALY);

## Research interests

Semantics of programming languages, games semantics, lambda-calculus, reduction and transition systems, exact real number computation, constructive analysis, proof assistants and proof theory.

## References

- [1] P. Di Gianantonio, F. Honsell, and M. Lenisa. A type assignment system for game semantics. *TCS*, 2008. to appear.
- [2] P. Di Gianantonio, F. Honsell, and M. Lenisa. RPO, second-order contexts, and  $\lambda$ -calculus. In *Foundations of Software Science and Computation Structures (FoSSaCS'08)*, number 4962 in LNCS, pages 334–349. Springer, 2008.
- [3] A. Ciaffaglione and P. Di Gianantonio. A certified, corecursive implementation of exact real numbers. *Theoretical Computer Science*, 351:39–51, 2006.
- [4] P. Di Gianantonio. Structures for multiplicative cyclic linear logic: Deepness vs cyclicity. In *Computer Science Logic (CLS'04)*, number 3210 in LNCS, pages 130–144. Springer, 2004.
- [5] P. Di Gianantonio and M. Miculan. Unifying recursive and co-recursive definitions in sheaf categories. In *Int. Conference on Foundations of Software Science and Computation Structures (FOSSACS '04)*, number 2987 in LNCS, pages 136–150. Springer, 2004.
- [6] P. Di Gianantonio and P. L. Lanzi. Lazy algorithms for exact real arithmetic. In *Workshop of the COMETA project on Computational Metamodels 2003*, number 104C in ENTCS, pages 113–128. Elsevier, 2004.
- [7] P. Di Gianantonio and M. Miculan. A unifying approach to recursive and co-recursive definitions. In *Workshop on Types for Proofs and Programs (Types '02)*, number 2646 in LNCS, pages 148–161. Springer, 2003.
- [8] L. Ong and P. Di Gianantonio. Games characterizing Levy-Longo trees. *Theoretical Computer Science*, 312:121–142, 2004.

- [9] L. Ong and P. Di Gianantonio. Games characterizing Levy-Longo trees. In *Int. Colloquium on Automata Language and Programming (ICALP '02)*, number 2380 in LNCS, pages 476–487. Springer, 2002.
- [10] A. Ciaffaglione, P. Di Gianantonio, F. Honsell, and L. Liquori. Foundations for dynamic object re-classification. Technical Report 03/2003, Dip. di Matematica e Informatica, Universit di Udine, 2003. <http://www.dimi.uniud.it/pietro/Papers/tdor.pdf>.
- [11] A. Ciaffaglione and P. Di Gianantonio. A tour with constructive real numbers. In *Workshop on Types for Proofs and Programs (Types '00)*, number 2277 in LNCS, pages 41–52. Springer, 2002.
- [12] P. Di Gianantonio. Game semantics for the pure lazy lambda-calculus. In *Conference on Typed Lambda Calculi and Applications (TLCA '01)*, number 2044 in LNCS, pages 106–120. Springer, 2001.
- [13] P. Di Gianantonio and G. Franco. The fine structure of game lambda-models. In *Conference on the Foundation of Software Technology and Theoretical Computer Science (FSTTS '00)*, number 1974 in LNCS, pages 429–441. Springer, 2000.
- [14] P. Di Gianantonio. An abstract data type for real numbers. *Theoretical Computer Science*, 221:295–326, 1999.
- [15] A. Ciaffaglione and P. Di Gianantonio. An approach to real numbers in Coq. In *Workshop on Types for Proofs and Programs (Types '99)*, number 1956 in LNCS, pages 114–130. Springer, 2000.
- [16] P. Di Gianantonio, G. Franco, and F. Honsell. Game semantics for untyped  $\lambda\beta\eta$ -calculus. In *Conference on Typed Lambda Calculi and Applications (TLCA '99)*, number 1591 in LNCS, pages 114–128. Springer, 1999.
- [17] P Di Gianantonio and G. Franco. A type assignment system for the game semantics. In *Italian Conference on Theoretical Computer Science (ICTCS '98)*, pages 37–47. World Scientific, 1998.
- [18] P Di Gianantonio, F. Honsell, and L. Liquori. A lambda calculus of objects with self-inflicted extension. In *Conf. on Object-Oriented Programming, System, Languages and Applications (OOPSLA '98)*, pages 166–178, 1998.

- [19] P Di Gianantonio. An abstract data type for real numbers. In *Int. Colloquium on Automata Language and Programming (ICALP '97)*, number 1256 in LNCS, pages 121–131. Springer-Verlag, 1997.
- [20] P Di Gianantonio, F. Honsell, S. Liani, and G. Plotkin. Countable non-determinism and uncountable limits. In *5th conference in Concurrency Theory (CONCUR '94)*, number 836 in LNCS, pages 130–145. Springer-Verlag, 1994.
- [21] P Di Gianantonio, F. Honsell, and G. Plotkin. Countable non-determinism and the lambda-calculus. *Nordic Journal of Computing*, 2:126–145, 1995. -.
- [22] P. Di Gianantonio. *A Functional Approach to Computability on Real Number*. PhD thesis, University of Pisa, 1993. Technical Report TD 6/93.
- [23] P Di Gianantonio. Real number computability and domain theory. In *18th symposium on Mathematical Foundation of Computer Science (MFCS '93)*, number 711 in LNCS, pages 413–422. Springer-Verlag, 1993.
- [24] P Di Gianantonio and F. Honsell. An abstract notion of application. In *Conference on Typed Lambda Calculi and Applications (TLCA '93)*, number 664 in LNCS, pages 124–138. Springer-Verlag, 1993.
- [25] P Di Gianantonio. Real number computability and domain theory. *Information and Computation*, 127(1):11–25, May 1996.
- [26] P Di Gianantonio. A golden ratio notation for the real number. Technical report, CWI Amsterdam, 1996.