

Prof. Marco DORIGO, Ph.D.



Prof. Marco Dorigo was born on August 26, 1961, in Milan, Italy. He is a research director for the Belgian Funds for Scientific Research (FNRS), and a co-director of IRIDIA, the artificial intelligence lab of the Université Libre de Bruxelles. Prof. Dorigo is the proponent of the “ant colony optimization” metaheuristic (see his book published by MIT Press in 2004), and one of the founders of the swarm intelligence research field (see his book published by Oxford University Press in 1999).

Recently Prof. Dorigo got involved with research in “swarm robotics”: he is the coordinator of two swarm robotics projects funded by the Future and Emerging Technologies Program of the European Commission, namely “Swarm-bots: Swarms of self-assembling artifacts” and “Swarmanoid: Towards humanoid robotic swarms”.

For his major scientific contributions, Prof. Dorigo was awarded in 2003 the “Marie Curie Research Excellence Award” by the European Commission. In 2005, he received the “Dr A. De Leeuw-Damry-Bourlart Award in Applied Sciences” by the King of Belgium, Albert II. In 2007, Prof. Dorigo received the “Cajastur International Prize for Soft Computing”, awarded by the “Foundation for the Advancement of Soft Computing”. He is the recipient of an ERC Advanced Grant (2010).

Education and qualifications

- 1986 **Laurea** (Master) in Industrial Technologies Engineering, Politecnico di Milano, Italy.
- 1992 **Doctorate** in Systems and Information Engineering, Politecnico di Milano, Italy.
- 1995 **Agrégé de l’Enseignement Supérieur** (qualification for university professorship) at the Applied Sciences Faculty, Université Libre de Bruxelles, Belgium.

Professional experience

- May 1986 – Mario negri institute for pharmacological research, Milano. Researcher in
- Dec 1987 artificial intelligence with Prof. Stefano Cerri.
- Jan 1988 – Politecnico di Milano, dipartimento di elettronica e informazione. Graduate
- Oct 1988 researcher with Prof. Marco Somalvico.
- Nov 1988 – Politecnico di Milano, dipartimento di elettronica e informazione. Graduate
- Oct 1991 student in Systems and Information Engineering with Prof. Alberto Colorni and Prof. Marco Somalvico.

- Nov 1991 – Politecnico di Milano, dipartimento di elettronica e informazione. Researcher
Mar 1992 in artificial intelligence.
- Apr 1992 – International Computer Science Institute, Berkeley, California. Post-doctoral
Mar 1993 researcher in artificial intelligence with Prof. Jerome Feldman.
- Apr 1993 – Politecnico di Milano, Dipartimento di elettronica e informazione. Researcher
Jun 1993 in artificial intelligence.
- Jul 1993 – IRIDIA, Université Libre de Bruxelles, Belgium. NATO-CNR post-doctoral
May 1994 researcher in artificial intelligence with Prof. Philippe Smets.
- Jun 1994 – IDSIA, Istituto Dalle Molle, Lugano, Switzerland. Post-doctoral researcher in
Jul 1994 artificial intelligence and robotics.
- Aug 1994 – IRIDIA, Université Libre de Bruxelles, Belgium. Marie Curie post-doctoral
May 1996 researcher in artificial intelligence with Prof. Philippe Smets.
- Jun 1996 – IDSIA, Istituto Dalle Molle, Lugano, Switzerland. Post-doctoral researcher in
Sep 1996 artificial intelligence and robotics.
- Oct 1996 – IRIDIA, Université Libre de Bruxelles, Belgium. FNRS associate researcher
Sep 2000 (Chercheur qualifié). Tenured position at the Belgian National Funds for Scientific Research (FNRS).
- Oct 2000 – IRIDIA, Université Libre de Bruxelles, Belgium. FNRS senior researcher
Sep 2004 (Maître de recherches). Tenured position at the Belgian FNRS.
- Since Oct 2004 IRIDIA, Université Libre de Bruxelles, Belgium. FNRS research director
(Directeur de recherches). Tenured position at the Belgian FNRS.

Participation in committees and scientific councils

- Member of the IEEE Frank Rosenblatt Award Committee (May 2007 – May 2010)
- Member of the IEEE Fellow Committee (2008, 2011).
- Fellow of the European Coordinating Committee for Artificial Intelligence (ECCAI) (since June 28th, 2007).
- Fellow of the Institute of Electrical and Electronics Engineers (IEEE) (since January 1st, 2006).
- Editorial activities:
 - Editor-in-Chief of the journal “Swarm Intelligence” (founding editor, 2007)
 - Associate editor for nine international journals
 - Member of the editorial board of seven international journals
 - Editor of twelve books/proceedings/journal special issues
 - Member of the program committees of about 180 international conferences in the last ten years

Participation in juries

- Foreign expert in the examination committees for 11 Ph.D. defenses.
- Member of the examination committees for 4 Ph.D. defenses.
- More than 50 supervised Master Student Theses.

Teaching experience in training

Directs a group composed of:

- Nine senior researchers: Dr. Mauro Birattari (FNRS research associate, tenured position), Dr. Thomas Stützle (FNRS research associate, tenured position), Dr. Manuel López-Ibáñez, Dr. Franco Mascia, Dr. Rehan O'Grady, Dr. Paola Pellegrini, Dr. Alexander Scheidler, Dr. Vito Trianni and Dr. Ali Emre Turgut (post-docs).
- Twelve doctoral students.

Publications

Prof. M. Dorigo has a 25-year scientific career, resulting in various publications: 3 international books and 13 edited international books; 81 articles in international journals; 3 encyclopedic entries; 7 articles in national journals; 118 articles presented at international conferences; 10 articles presented at national conferences; 17 book chapters.

Citations

Many of his papers have received a number of citations well above the average. As of May 2011, the Google Scholar database calculates his *h*-number as 68 and his *g*-index as 191. The total number of citations to his papers is more than 35,000. His ten top cited papers have more than 20,000 citations.

For his scientific and research activities Prof. M. Dorigo is recognized as a leading scientist in the areas of metaheuristic optimization and of swarm intelligence.

We wish Prof. Dorigo health and creative power for new achievements!

Editorial board of Int. J. Bioautomation