

Marco Piastra, M.Sc.(Eng.), Ph.D.

Nationality: Italian, EU

Born in Pavia (Italy) on 6 August, 1959

As an independent professional, Marco Piastra has more than 20 years of international experience in the capacity of *Digital Strategy Advisor*, *Solutions Architect* and *Project Manager*, devising innovative solutions and original products for public, medium and large private companies in fields such as e-government, banking, automotive, telecom and automation industry.

Member of the Italian Board for Professional Engineers since 1997

IEEE Member since 1998

Research Interests

- Artificial Intelligence, in particular for industrial applications;
- Self-Organizing and Autonomous Systems;
- 3D and 4D Image Processing, in particular for medical applications;
- Machine Learning;
- Symbolic Logic;
- Parallel and Distributed Computing.

Publications

- International Journals: 7
- International Conferences: 9
- Book Chapters: 2

Recent Publications

- [1] Marco Piastra, Epifanio Virga, Onsagerian formula for the excluded volume of spherodisks, *Physical Review E*, 88(6) 2013:064501.
- [2] Marco Piastra, Epifanio Virga, Octupolar approximation for the excluded volume of axially symmetric convex bodies, *Physical Review E*, 88(3) 2013:032507.
- [3] Marco Piastra, Self-organizing adaptive map: Autonomous learning of curves and surfaces from point samples, *Neural Networks*, (41) 2013: 96-112.
- [4] Marco Piastra, Epifanio Virga, Phase polarity in a ferrofluid monolayer of shifted-dipole spheres, *Soft Matter*, (8) 2012:10969-10981.
- [5] Giacomo Parigi, Angelo Stramieri, Danilo Pau, Marco Piastra: GPU-based Parallel Implementation of a Growing Self-organizing Network. *ICINCO* (1) 2012:633-643.
- [6] Antonietta Pepe, Laura Brandolini, Marco Piastra, Juha Koikkalainen, Jarmo Hietala, Jussi Tohka: Simplified Reeb Graph as Effective Shape Descriptor for the Striatum. *MeshMed* 2012: 134-146.
- [7] Laura Brandolini, Marco Piastra: Computing the Reeb Graph for Triangle Meshes with Active Contours. *ICPRAM* (2) 2012: 80-89.

[8] Marco Piastra: A growing self-organizing network for reconstructing curves and surfaces. IJCNN 2009: 2533-2540.

Teaching

- Intelligenza Artificiale, Università degli Studi di Pavia, Faculty of Engineering, contract professor, 2001/2002, 2002/2003, 2003/2004.
- Intelligenza Artificiale 1, Università degli Studi di Pavia, Faculty of Engineering, contract professor, 2004/2005, 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2009/2010, 2010/2011.
- Intelligenza Artificiale 2, Università degli Studi di Pavia, Faculty of Engineering, contract professor, 2004/2005, 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2009/2010.
- Artificial Intelligence, Università degli Studi di Pavia, Faculty of Engineering, contract professor, 2011/2012, 2013/2014.

Tutoring

- M.Sc.theses tutored or co-tutored: 25
- Ph.D. students tutored or co-tutored: 2.

Other institutional experiences

- Dipartimento della Funzione Pubblica, Roma , Technical Director of Special Project A9 (telematic exchange of e-government data), 2000-2001.
- Autorità per l'Informatica nella Pubblica Amministrazione (AIPA), Roma, Senior Technical Advisor (technical support to the definition of national regulations and standards for electronic data exchange), 1999-2000.

Education

- **M.Sc. (Eng.)**
Electronic Engineering, Università degli Studi di Pavia (Italy), 1997
- **Ph.D.**
Informatics Engineering, Università degli Studi di Pavia (Italy), 2001