1. An Overview

Riccardo M.G. Ferrari received the "Laurea" degree (Cum Laude and printing honours) in Electronic Engineering from the University of Trieste in 2004 and the Ph.D. degree in Information Engineering in 2009. He is the recipient of the 2005 Giacomini Award of the Italian Acoustic Society. He has authored and co-authored several papers published in international journals and conference proceedings. Since 2008 he is Junior Researcher at the R&D dept. of Danieli Automation S.p.A. (Buttrio, Italy), a leading world-class company providing automation and measurement solutions for the steel industry. His current research interests include fault diagnosis for nonlinear centralized and distributed dynamic systems, numerical modeling and industrial applications of advanced monitoring and control techniques.

In 2005 he earned a B.A. in Classical Piano from the "G. Tartini" Conservatory of Music of Trieste (Italy).

2. Detailed Biographical Notes

Jan. 2008 – present Junior Researcher at R&D department of Danieli Automation S.p.A., Italy: design of advanced fault diagnosis systems for industrial plants and processes, design of measuring devices based on machine vision, and development of Finite Element Analysis (FEM) models for the optimization of electromagnetic sensors.

Apr. 2009 Ph.D. degree in Information Engineering from University of Trieste, Italy. Title of thesis work: "Distributed Fault Detection and Isolation of Large-scale Nonlinear Systems: an Adaptive Approximation Approach"; advisor: Prof. Thomas Parisini; co-advisor: Prof. Marios M. Polycarpou (University of Cyprus).

Oct. – Nov. 2006 Visiting student in the Electrical and Computer Engineering Department, University of Cyprus.

Jan. 2005 – Dec. 2008 Ph.D. student in the Department of Electrical, Electronic and Computer Engineering (DEEI), University of Trieste, Italy. Teaching Assistant for Digital Process Control class (2005, one semester), and for Data Analysis and System Identification class (2006, one semester).

Oct. 2005 B.A. degree in Classical Piano from "G. Tartini" Conservatory of Music of Trieste, Italy, with 109/110 marks. Title of thesis work: "Il Problema del Tocco al Pianoforte: dal Punto di Vista Pianistico a quello Fisico attraverso uno Studio Simulativo al Calcolatore" (The Pianistic Touch: the Musician and the Physicist Point of View and a Computer Model); advisor: M.o. Igor Cognolato; co-advisor: Prof. Pietro Polotti.

Jun. 2004 - Jan. 2005 Control Systems Design Engineer at Ecomaster Projects, development of a fuzzy control system for a composting plant.

Apr. 2004 "Laurea" degree in Electronic Engineering from University of Trieste, with full marks (110/110), "Cum laude", and printing honours. Title of thesis work: "Il fenomeno acustoelastico in fogli metallici sottoposti a tensione: studio teorico, determinazione sperimentale e simulazione mediante il metodo delle celle" (The Acoustoelastic Effect in Pre-Stressed Metal Sheets: theoretical study, experimental detection and computer modelling with the Cell Method); advisor: Prof. Thomas Parisini; co-advisor: Prof. Enzo Tonti.

2. Awards

Aug. 2011 Co-author of paper winning the 2nd place in the Competition on Fault Detection and Fault Tolerant Control for Wind Turbines, awarded at IFAC 2011, Milan, August 28th – September 2nd, 2011.

Jun. 2005 Recipient of "Giacomini Award 2005" for the best italian MSc thesis in Acoustics, awarded by the Italian Acoustics Association.