



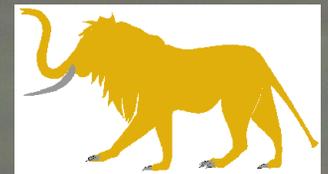
Perugia MISS Satellite Center

Report Year 2006

Prof. Stefano Saetta

stefano.saetta@unipg.it

www.unipg.it





MISS Perugia Location

MISS PERUGIA 2 locations:

- At DIIN Department in Perugia.
- At Polo Scientifico e Didattico di Terni, in Terni (80 km NE from Roma).





The DIIN Simulation team

- DIIN Simulation Team is rapidly growing up since 2001
- Today 5 researchers and professors are involved plus PhD Students
- In the future the expectation is to increase the activities and the group
- DIIN Simulation Team coordinator, Prof. Stefano SAETTA is active in simulation since 1999 and involved in conferences (i.e. Track Chair in SCSC) and initiatives with major Associations (i.e. Liophant Simulation, SCS)





Simulation Team Courses

- Currently in University of Perugia the Simulation Team teach the following courses involving “simulation elements”:
 - Modelling and Simulation for Industrial Plants, 3rd Year Mech.Engineering
 - Modelling and Simulation for Project Management, 3rd Year Mangt.Engineering
 - Modelling and Simulation for Supply Chain Management, 3rd Year Mangt.Engineering





Simulation Team Projects

- DIIN Simulation Team projects are mostly directly to cooperation with SME, among the others we can outline:
 - Modelling and Simulation of distribution of concrete
 - Applied Modelling and Simulation International Conferences, April 5-7 in Buzios, Brazil
 - Scenario Analysis for the High Velocity railways
 - Interactions in between Demand Forecasting and Inventory Control Management
 - Pattern Recognition
 - Modelling and Simulation in SMEs





Simulation Team Resources

- DIIN Simulation Team operates in Labs located in Perugia University and Terni Centers (over 50 PCs); as simulation tools we use commercial packages and languages:
 - ModSim
 - Automod
 - Java
 - Java package such as J2EE, Hibernate, JSF.
 - C++





Web Educational Supports

Web Based Simulation as approach for Tool Development devoted to create Educational Business Games:

- J20
Concurrent
Engineering
on Fighter
Design
(based on
MISS Genoa
Center
Concepts





On-Going Initiatives

- DIIN Simulation Team innovative initiatives involve cooperation with other centers in:
 - Activation of a Master in Management Science and Simulation
 - Evaluating the possibility to manage AMS2008
 - Project of VOC emissions (submitted LIFE project)
 - Participation to Summer School in Multicriteria Analysis (submitted Socrates Project)





International Activities



AMS Conference in Buzios, Brazil Sponsored by
Petrobras &
Italian Foreign Commerce Office



Framework agreement with
COPPE
LAMCE,
Rio de
Janeiro
University



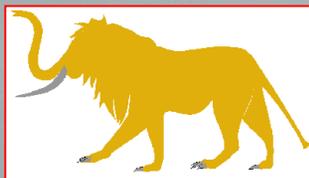
Proposal For Research
in Security & Supply Chain
Resilience:
Italy
France
Spain
Belgium





Perugia Center Staff

- Perugia Satellite Center Staff supporting the application to MISS is composed by:
 - Stefano Saetta (Industrial Engineering) Director
 - Marina Massei (Project Management) Associate Director 
 - Lorenzo Tiacci (Management Systems)
 - Andrea Martini (AI Techniques)
 - Daniela Leonardi (Environmental Modelling)
 - Massimo Pedetti (Formal Modelling)
 - Francesco Bianconi (Product Design)





2005 Publications...

- Bianconi Francesco, Saetta Stefano Antonio, Tiacci Lorenzo (2005) *A web based simulation game as learning tool for the design process of complex systems*, Journal of Design Research (1569-1551), In corso di stampa (in press), <http://jdr.tudelft.nl/>
- Bianconi Francesco, Saetta Stefano Antonio, Tiacci Lorenzo (2005) *Simulation of a competitive product design environment for engineering education*, 9th World Multiconference on Systemics, Cybernetics and Informatics , Orlando (Stati Uniti), 10-13 Luglio 2005, Stati Uniti



...2005 Publications...

- Bianconi Francesco, Saetta Stefano Antonio, Tiacci Lorenzo, Viazzo Simone (2005) *A web-based system to simulate a competitive design environment*, Summer Computer Simulation Conference , Cherry Hill (Stati Uniti), Cherry Hill (Stati Uniti), Stati Uniti
- Saetta Stefano Antonio (2005) *Modeling and Simulation for evaluating incident hazard in industrial activities*, Transactions of the Spring Simulation MultiConference , San Diego, CA, USA, April 3-24 2005, 1-56555-295-291-4
- Saetta Stefano Antonio, Geldermann Jutta, Leonardi Daniela (2005) *Multi-criteria analysis for the assessment of environmentally relevant installations*, Proceedings of the 20th International Conference on Solid Waste Technology and Management , Philadelphia, PA, USA. , April 3-6 2005 , 1091-8043



..2005 Publications...

- Saetta Stefano Antonio, MARTINI Andrea (2005) *Discrete event simulation based tool for the maintenance facility of Electrical engines for transportation utilities*, First International Conference on Maintenance Management for Quality life, Safety and Productivity, , Venice, April, 14-15 2005
- Saetta Stefano Antonio, Leonardi Daniela, Geldermann Jutta (2005) *Analisi multicriteriali per la valutazione di installazioni rilevanti dal punto di vista ambientale*, Atti del 5° Congresso Nazionale CIRIAF , Perugia , 8-9 Aprile 2005
- Saetta Stefano Antonio, Tiacci Lorenzo (2005) *A Study in the Supply Chain of Natural Stones. New Improvements*, The 9th World Multi-Conference on Systemics, Cybernetics and Informatics , Orlando, Florida, USA., July 10-13 2005, 980-6560-62-0



2005 Publications

- Saetta Stefano Antonio, Tiacci Lorenzo (2005) *Risk Analysis Methods for workplace safety in manufacturing. The case of a company in the automotive sector*, The International Workshop on Modeling and Applied Simulation , Bergeggi (SV), October 16 -18 2005, , 88-900732-8-4
- Saetta Stefano Antonio, Tiacci Lorenzo (2005) *A model for the optimisation of the routing problem for the transportation activity in a process industry*, The International Workshop on Harbour, Maritime & Multimodal Logistics Modelling and Simulation , Marseille, France, October 20-22 2005, 2-9520712-4-1
- Saetta Stefano Antonio, Tiacci Lorenzo (2005) *Modelling and simulation in the sector of natural stones for improving the international competitiveness*, Challenges for Industrial Production Workshop , Karlsruhe, Germany, Karlsruhe, Germany, 3-937300-85-6
- Tiacci Lorenzo, Saetta Stefano Antonio (2005) *A new methodology for applying simulation driven metaheuristics to the balancing of security inspection lines*, Winter Simulation Conference 2005 , Orlando, Florida, USA, Orlando, Florida, USA