



MISS Application

Perugia

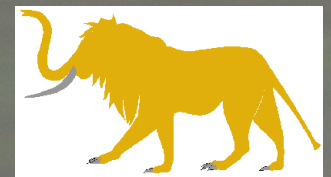
MISS Satellite Center

Year 2005

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DIIN Perugia

- The Dipartimento di Ingegneria Industriale (DIIN) is an Institution of the University of Perugia, one of the oldest (founded by the Pope in the 1308) and more prestigious University of Italy.
- DIIN research interests are in many fields of industrial engineering such as system modelling and simulation, industry, management of energy and environment.
- In DIIN there are more than 100 people considering professors, assistant professors and researchers. In the 2004 incomes overpass 3'000'000€.





MISS Satellite Center Aims

Perugia McLeod Institute of Simulation Sciences (MISS) group is strongly supporting use of simulation as quantitative method for human activities analysis.

MISS provides contribution in networking, exchanges, cooperations, joint projects

MISS Perugia cooperate with UNIGE and others italian and international Research Centers in order to promote and stimulate simulation studies and initiatives.





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”:
 - Industrial Plants, 3rd Year Mech.Engineering
 - Logistics System Management, 3rd Year Mangt.Engineering
 - Industrial Management, 3rd Year Mech.Engineering
 - Supply Chain Management, 5th Year, Mech.Engineering





Simulation Team Projects

- DIIN Simulation Team projects are mostly directly to cooperation with SME, among the others we can outline:
 - Supply Chain Performances Measurement: in cooperation with construction company
 - Heuristics for transportation: developing effective algorithms for managing the distribution phases
 - Tecnocar: Truck Trailer Customization Line Simulation
 - QCSView: Quality Control in Paper Industry





Simulation Team Resources

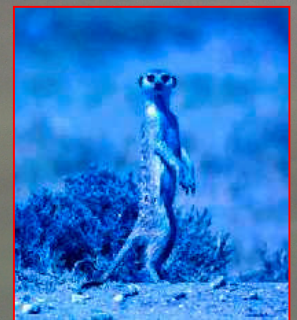
- DIIN Simulation Team operates in Labs located in Perugia University and Terni Centers (over 50 PCs); as simulation tools we use commercial packages and languages:
 - ModSim
 - Automod
 - Java
 - Java package such as J2EE, Hibernate, JSF.
 - C++





On-Going Initiatives

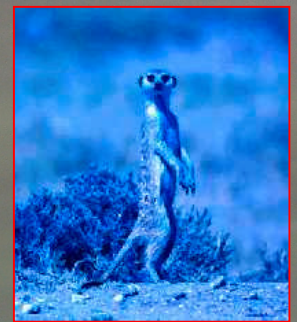
- DIIN Simulation Team innovative initiatives involve cooperation with other centers in:
 - GIPIETRE a new strategy in the supply chain of natural stones
 - GLOWS: the security of global flows of people and goods
 - J20: Web Business Game about Aircraft Design
 - L@USTICS: EU-LA Logistics





GIPIETRE: a new strategy in the supply chain of natural stones

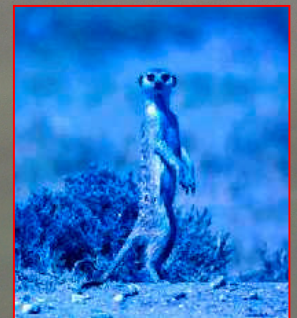
- A study supported by the Italian Foreign Trade Institution (ICE – Italian government)
- Studying new solutions in the management of the supply chain in a sector, natural stones, where Italian expert producers are now facing the competition from new countries
- How to re-invent the whole supply chain to maximise the results





GLOWS: the security of global flows of people and goods

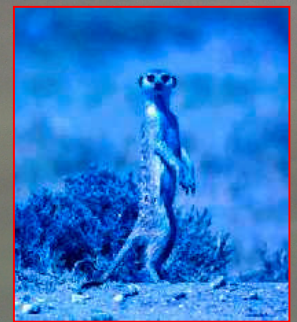
- An European initiative for strengthening the security of flows of people and goods while maintaining a low cost and quick logistic systems
- Modeling infrastructures such as airports and ports in order to evaluate the impact of new security solutions and interrelations between ICT systems





J20: Web Business Game about Aircraft Design

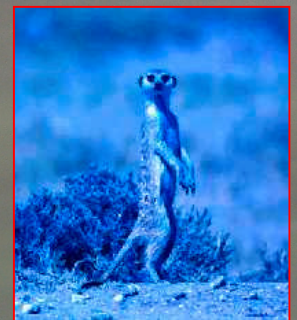
- Competitive teams must simulate a tender for a new airplane (simulation of the real situation in the defense)
- They must optimise design parameters in order to reach required performances while minimising development costs and make the best offer
- Game base on a Web Application





L@USTICS

- An academic proposal of a research training activities between EU and LA universities
- Participants: UNIGE and UNIPG (Italy), LSIS (France), UAB and UPC (Spain), COPPE UFRJ (Brasil), UBB (Chile), UNP (Mexico)





Perugia Satellite 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)

