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Intelligence and Security as a Framework for Applying Serious Games

Resume: Agostino G. Bruzzone began his engineering studies at the Italian Naval Academy with the Faculty of Pisa. After successfully completing this phase, he transferred to the University of Genoa where he earned his doctorship in Mechanical Engineering.

Since 1991, he has taught "Theories and Techniques of Automatic Control" and in 1992 he has become a member of the industrial simulation work group at the ITIM University of Genoa; currently he is Full Professor in DIPTEM, Genoa University.

He has utilized extensively simulation techniques in harbor terminals, maritime trading and sailboat racing sectors.

He worked on research projects involving innovative modeling, AI techniques and DOE (design of Experiments); particular attention was focused on the application of Neural Networks and Fuzzy Logic to industrial plant problems using Simulation and Chaos Theory.

He has been actively involved in the scientific community from several years and served as Director of the McLeod Institute of Simulation Science (MISS), Vice-Director of M&S Ne, Associate Vice-President and Member of the Board of the SCS (Society for Modelling & Simulation international), President of the Liophant Simulation, VicePresident of MIMOS (Movimento Italiano di Simulazione), Industrial Relation Chair in the Society for Computer Simulation in Europe, and Italian Point of Contact for the ISAG (International Simulation Advisory Grouyp) and Sim-Serv.

He acquired extensive experience as a member of International Technical and Organization Committees (i.e. Al Application of IASTED, Al Conference, ESS, ESM) and as a general coordinator of scientific projects (i.e. General Chair of Simulation In Industry Conference, "Summer Computer Simulation Conference", "International Mediterranean Modelling Multiconference" and Web Based Simulation Conference, Program Chair of the Workshop in Harbor and Logistics Modeling, Guest Editor for Special Issue of Harbor and Maritime Simulation in Simulation, Program Chair of Engineering Application in WCSS and Track Chair for Manufacturing in SCSC).

He has written more than 150 scientific papers in addition to technical and professional reports in partnerships with major companies (i.e. IBM, Fiat Group, Contship, Solvay) and agencies (i.e. Italian Navy, NASA, National Center for Simulation, US Army).

Currently He is in charge as and as Director of the Technical Council of "SIMulation applications in Management, PLanning & forEcaSTing" for the Society of Computer Simulation International.

He is International Director and Genoa Site Director of the Genoa Centre of the McLeod Institute of Simulation Science (an Institution with 28 Centers distributed worldwide: Brazil, China, USA, UK, Italy, France, Germany, Canada etc.).

He is founder member and president of the Liophant Simulation.

He is also and member of Who's Who, IEEE, IASTED, ANIMP etc. Currently he works in the Department of Production Engineering and Mathematical Modelling (DIPTEM) at the University of Genoa as Full Professor, in the field of simulator-based applications for



industrial plants, developing new methodologies and intelligent system integration techniques.

He teaches Project Management and "Industrial Logistics at the University for students in the Mechanical Engineering (4th year), Management Engineering (4th year) and Logistics & Production Engineering (3rd year) degree courses.

Abstract: Serious Games are providing today opportunities to approach new areas developing effective and efficient solution; the authors are presenting a joint venture devoted to the development of a Serious Games applied to the Security and the Intelligence sectors; this game emphasizes the importance of communication, information sharing and cooperation even if the whole framework involve strong competitiveness among the players.

This Game, named Sibilla, provides the opportunity to play interactively a competitive game, in a distributed environment where different Agencies operates concurrently with benefits and penalties connected to both common and individual objective achievements. The project is addressing Critical Infrastructure Protection and Homeland Security issues even if the concept promoted in the game have impact in many other sectors such as general management and corporate organization.