Modeling & Simulation Resource Directory

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Modeling Simulation

RESOURCE DIRECTORY

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THE SOCIETY FOR MODELING AND SIMULATION INTERNATIONAL (SCS) P.O. BOX 17900, SAN DIEGO, CA, 92177, USA

I. Modeling & Simulation Software Guide

@RISK

Palisade Corporation 31 Decker Road Newfield, NY 14867 Tel: (607) 277-8000 Fax: (607) 277-8001 Toll free: (800) 432-7475 Email: sales@palisade.com

http://www.palisade.com

Description: @RISK uses a technique known as Monte Carlo simulation to allow you to take all possible outcomes into account. Simply replace uncertain values in your spreadsheet model with @RISK functions to represent a range of possible values. Select bottom-line cells, like Total Profits, as outputs, and start a simulation. @RISK recalculates your spreadsheet hundreds or even thousands of times, each time selecting random numbers from the @RISK functions you entered. The result: distributions of possible outcomes and the probabilities of getting those results. This not only tells you what could happen in a given situation, but how likely it is that it will happen. @RISK 4.5 for Excel comes in three editions — Standard, Professional, and Industrial — to allow you to select the feature set which best meets your needs.

20-sim

Controllab Products B.V. Drienerlolaan 5 EL-CE 7522 NB Enschede The Netherlands Tel: +31 53 489 3096 Fax: +31 53 489 2223 Email: info@controllab.nl

http://www.20sim.com

Description: 20-sim is a modeling and simulation program that runs under Windows. With 20-sim you can simulate the behavior of dynamic systems, such as electrical, mechanical, and hydraulic systems, or any combination of these. 20-sim has been developed at the Control Laboratory of the University of Twente, a successor of the famous TUTSIM package. It fully supports graphical modeling, allowing users to design and analyze dynamic systems in an intuitive and user-friendly way, without compromising power.

acsIXtreme

AEgis Technologies Group, Inc. 631 Discovery Drive Huntsville, AL 35806 Tel: (256) 922-0802 Fax: (256) 922-0904 Email: sales@aegistg.com

http://www.acslXtreme.com

Description: acslXtreme is the sophisticated, next-generation tool for modeling continuous dynamic systems and processes. Simple to learn and easy to use, acslXtreme is a refreshingly modern application built on top of the latest technologies including .NET and XML. Whether your expertise is heat transfer, fluid flow, motion dynamics, 6-DOF modeling, electronics, pharmacology, or toxicology, in acslXtreme you will find a tool that is versatile and powerful enough to meet the needs of your most challenging simulation problems. With acslXtreme, you work easily and efficiently to achieve quick and accurate results. acslXtreme provides both graphical and text-oriented modeling environments that give you full control over your models. Best of all, acslXtreme helps you present and preserve your findings so you continue to capture value for your work well into the future.

AgentSheets

AgentSheets, Inc. 6560 Gunpark Dr., Suite D Boulder, CO 80301 Tel: (303) 530-1773 Fax: (303) 530-3018 Email: sales@agentsheets.com http://www.agentsheets.com

Description: Agent Sheets is a revolutionary authoring tool that allows non-programmers to create agents with behaviors and missions, teach agents to react to information and process it in personalized ways, and combine agents to create sophisticated interactive simulations and models. Our customers use AgentSheets to create interactive games, virtual worlds, training simulations, information gathering and personalizing agents, and other interactive content. Users can interact with their agents via multiple modalities such as mouse and keyboard input, speech recognition and synthesis, music, and video. AgentSheets features our unique Visual AgenTalk® tactile and rule-based language to create, modify, and customize agent behavior. The Ristretto® generator technology incorporated in AgentSheets turns a simulation directly into an interactive Java applet embedded in a Web page. AgentSheets enables users to deliver content on PDAs (such as iPAQ), cell phones, Web browsers, and desktop machines. Content can take the form of Java applets, JavaBeans or Macromedia Flash movies. AgentSheets runs both on Windows and Macintosh platforms. Both versions are available at our secure store. If you wish to try the products before buying them, you can download a 10-day trial version.

Alices

CORYS T.E.S.S. 74, Rue des Martyrs 38027 Grenoble Cedex 01 France

Tel: +33 4 76 28 82 00 Fax: +33 4 76 28 82 11 Email: coryscom@corys.fr http://www.corys.com **Description:** Alices is the fully integrated modeling and simulation environment. Alices combines the long experience of Corys T.E.S.S. in power plant and complex systems real-time simulation with the most recent software technologies. Alices is designed to produce high-fidelity dynamic simulation models with less effort, lower development times, and lower costs.

Analytica

Lumina Decision Systems, Inc. 26010 Highland Way Los Gatos, CA 95033 Tel: (650) 212-1212 Fax: (650) 240-2230 Toll free: (877) 6-Lumina Email: info@lumina.com

http://www.lumina.com

Description: Analytica 3.1 brings clarity and power to business modeling. Analytica is a visual software tool for creating, analyzing, and communicating quantitative business models. Analytica takes you beyond the spreadsheet, making it easy and fast to communicate the essential qualitative structure of your models with the graphical clarity of influence diagrams; scale up your models to handle the multidimensional problems of the real world with power and ease using Intelligent Arrays; manage risk and uncertainty using efficient Monte Carlo simulation; and deploy models on the web quickly and easily (via the Analytica Decision Engine). Download a free 30-day trial from the Web site.

ANTHEM™

CAE 8585 Côte de Liesse Saint-Laurent, Quebec Canada H4T 1G6 Tel: (514) 341-6780 Toll free: (800) 760-0667 Fax: (514) 341-7699 http://www.cae.com Description: CAE's advanced thermal-hydraulic model (ANTHEM™) is based on a rigorous application of the equations of mass, momentum, and energy conservation and implicit numerical techniques combined with the latest developments in computer technology. ANTHEM has been successfully installed and validated on numerous simulators and simulator upgrades currently certified for training. A single model is used for all operations without switching to reduced nodalizations or simplified models. The model takes into account such phenomena as feed and bleed cooling, shrink and swell, loop seals, natural circulation, flow stagnation, local boiling and condensation, phase separation, and the effect of local buildups of void or non-condensables. ANTHEM is a non-equilibrium, non-homogeneous, drift flux model.

AnyLogic

XJ Technologies Politekhnicheskaya Street, 21 St. Petersburg, 194021 Russian Federation Tel: +7 (812) 247-1674 North America: (630) 717-8066 Fax: +7 (812) 247-1639 http://www.xjtek.com **Description:** AnyLogic is a professional simulation tool for complex discrete, continuous, and hybrid systems. Powerful and flexible, it is used to model, simulate, visualize, and analyze a diverse range of real-world problems. AnyLogic is innovative software based on such advanced technologies as UML, Java, hybrid systems theory, and best numerical methods. AnyLogic is a general-purpose simulation tool. Its modeling language is flexible, capable of capturing a great variety of real-world phenomena of discrete, continuous, and hybrid nature. XJ Technologies develops, markets, and sells simulation and design automation software and services. Download a 15-day trial of AnyLogic 5.2.0 from the Web site.

Arena

Rockwell Software The Park Building 504 Beaver Street Sewickley, PA 15143 Tel: (412) 741-3727 Fax: (412) 741-5635

Email: arena-info@software.

rockwell.com

http://www.arenasimulation.com

Description: Organizations throughout the world are quickly moving to adopt process modeling and simulation as an integral part of their business decision making. With wider acceptance of simulation, consumers are demanding tools that support a breadth of applications, scale to fit different needs through a project life cycle, and integrate with corporate modeling and database systems. Rockwell Software fulfills these needs with the Arena product family.

AutoMod™

Brooks Automation, Inc. 5245 Yeager Road Salt Lake City, UT 84116-2877 Tel: (801) 736-3201 Fax: (801) 736-3443 Email: automod-info@brooks.

Description: The AutoMod™ Suite of simulation software provides unsurpassed tools for the design, analysis, and emulation of complex systems. AutoMod combines Virtual Reality (VR) graphics with a flexible, powerful, discrete, and continuous simulation environment. Templates of commonly used components facilitate quick and accurate modeling of a wide range of systems, such as manufacturing operations, material handling system, tanks and pipe networks, warehousing/distribution centers, transportation and logistics systems, baggage handling and airport operations, semiconductor manufacturing, and material handling.

CimStation Inspection

http://www.automod.com

SILMA 24148 Research Drive Farmington Hills, MI 48335 Tel: (248) 426-9090 Fax: (248) 426-9095 Toll free: (800) 34-SILMA Email: info@silma.com http://www.silma.com Description: CimStation Inspection is a powerful 3-D graphics simulation and programming tool used to create and optimize programs for Coordinate Measuring Machines (CMMs). CimStation Inspection facilitates concurrent engineering by enabling manufacturers to create CMM programs from CAD data long before the physical part exists or the machine is purchased. CimStation Inspection is available on UNIX workstations and for Windows NT. CimStation Inspection can be purchased through SILMA's sales offices, through a network of International Distributors, and through U.S. Resellers. As programs are created and edited, users visualize the CMM, probes, parts, and fixtures in real-time 3-D graphics. Simulations can be replayed at any speed and viewed from any angle or distance. Using CimStation Inspection, CMM programmers can develop and verify the inspection sequence required to inspect a new part in a fraction of the time it would take to manually generate the same program.

COMET™/Chorus™

CAE 8585 Côte de Liesse Saint-Laurent, Quebec Canada H4T 1G6 Tel: (514) 341-6780 Toll free: (800) 760-0667 Fax: (514) 341-7699 http://www.cae.com **Description:** COMETTM (Core Model based on Equivalence Theory) is used to accurately simulate of all types of nuclear reactors in three dimensions. Chorus is a Windows-based application used to interpret huge amounts of data in order to aid in the design of a reactor's core. Chorus is designed to work in conjunction with COMET in order to optimize refuelling upgrades.

Crystal Ball 7

Decisioneering, Inc. 1515 Arapahoe Street Suite 1311 Denver, CO 80202 Tel: (303) 534-1515 Fax: (303) 534-4818 Toll free: (800) 289-2550 Email: sales@crystalball.com **Description:** Crystal Ball 7 Standard Edition is the easiest way to perform Monte Carlo simulations in your own spreadsheets. Crystal Ball automatically calculates thousands of different "what if" cases, saving the inputs and results of each calculation as individual scenarios. Analysis of these scenarios reveals to you the range of possible outcomes, their probability of occurring, which input has the most affect on your model and where you should focus your efforts. With Crystal Ball 7 you can add scalable methods for collaborating, communicate and persuade, and get a credible picture of risk.

CSIM 19

Mesquite Software, Inc. 8500 N. Mopac Expwy, Suite 825 Austin, TX 78759 Tel: (512) 338-9153 Fax: (512) 338-4966

http://www.decisioneering.com

Toll free: (800) 538-9153 Email: info@mesquite.com http://www.mesquite.com **Description:** With the introduction of CSIM 19, Mesquite Software brings you an advanced simulation toolkit to implement process-oriented, discrete-event models for larger, more complex systems. Gain valuable insight into your system's dynamic behavior using CSIM 19's impressive new features. Enjoy the unparalleled flexibility and time savings of working with standard C or C++ programming languages.

D-ITG

Contact Antonio Pescape Email: Pescape@unina.it **Description:** Distributed Internet Traffic Generator (D-ITG) is a synthetic traffic generator able to reproduce realistic traffic according to appropriate stochastic processes.

Datapath® X

CAE 8585 Côte de Liesse Saint-Laurent, Quebec Canada H4T 1G6 Tel: (514) 341-6780 Toll free: (800) 760-0667 Fax: (514) 341-7699

http://www.cae.com

Description: Datapath® X is CAE's tool for the emulation of operator stations for plant process computers (PPC) and Distributed Control Systems (DCS). Datapath X, part of CAE's Datapath family, is a real-time data acquisition and control system comprised of geographically distributed nodes used for the monitoring and automation of electrical substations and power generation equipment. Datapath's well-integrated architecture provides a complete solution to customers, including operator user interfaces, control sequence development tools, I/O and redundancy. Datapath X is offered on all popular platforms, including Windows, Unix, and Linux.

DecisionPro™

Vanguard Software Corporation 1100 Crescent Green Cary, NC 27511 Tel: (919) 859-4101 Fax: (919) 851-9457

Toll free: (800) 538-8173 Email: sales@vanguardsw.com http://www.vanguardsw.com **Description:** DecisionPro picks up where your spreadsheet leaves off. It helps you make the best possible business decisions by applying proven management techniques such as decision tree analysis, Monte Carlo simulation, linear programming, and advanced forecasting methods. By integrating all of the key quantitative methods in management into a single application, DecisionPro gives you unprecedented power and flexibility. What's more, DecisionPro's innovative interface makes this power so easy to apply that you will find yourself using it even for routine problems.

DELMIA

Delmia Corporation 900 N. Squirrel Rd. Auburn Hills, MI 48326 Tel: (248) 267-9696 Fax: (248) 267-8585 Email: info@delmia.com http://www.delmia.com Description: DELMIA offers the most comprehensive suite of digital 3-D manufacturing solutions available in today's marketplace. We provide authoring applications to support manufacturing processes, which have to be planned, detailed, analyzed, and simulated throughout the Manufacturing Engineering Cycle. Integrated application suites are available to address process planning, cost estimation, factory layout, ergonomics, robotics, machining, inspection, factory simulation, and production management. DELMIA's Digital Manufacturing Solutions are built around an open Product, Process, and Resource (DS PPR Hub) model that provides a federating hub, connecting the different repositories and applications of the extended manufacturing enterprise. Extending well beyond traditional product data management, PPR enables continuous, dynamic simulation of product performance and manages the effects of change on the product, its processes, and resources. Integrity of the PPR data, optimization of the entire manufacturing processes, and a seamless integration with the design world are the main benefits of the DELMIA solution.

Dymola

MathPros, Inc. P.O. Box 102 Natick, MA 01760 Email: info@mathpros.com http://www.mathpros.com **Description:** Dynasim has developed Dymola with a new technology for multiengineering modeling and simulation for use within automotive, aerospace, robotics, process, and other applications. Dymola allows simulation of the dynamic behavior and complex interactions between, for example, mechanical, electrical, thermodynamic, hydraulic, and control systems.

DYNSIM

SimSci Esscor 26561 Rancho Parkway South Lake Forest, CA 92630 Tel: (949) 455-8150 Email: info.us@simsci.com http://www.simsci-esscor.com Description: A state-of-the-art dynamic process simulation program that enables the user to meet and beat the dynamic challenges of designing and operating a modern process plant safely and profitably. DYNSIM takes full advantage of SIM4ME, SimSci-Esscor's next generation user environment. Designed with model data inheritance as a key concept, it expedites your comprehensive engineering workflow – design, operational analysis, dynamic simulation, operator training, performance monitoring, and real-time optimization to reduce capital investment costs, improve process yields, and enhance management decision support while leveraging your existing technology investments.

eMPower

Tecnomatix Technologies, Ltd. Delata House 16 Hagalim Ave. Herzila, Israel 46733 Tel: (972) 9-9594777 Fax: (972) 9-9544402

http://www.tecnomatix.com

Description: Tecnomatix eMPower is the most comprehensive suite of Manufacturing Process Management (MPM) solutions available today. Its open platform provides a collaborative environment for authoring, simulating, and optimizing manufacturing processes across the extended enterprise. The eMPower solution helps manufacturing boost enterprise competitiveness by accelerating product introductions and time-to-volume, allowing rapid change implementation and the fast transfer of processes and best practices. eMPower connects all members of the manufacturing chain from designers, engineering and manufacturing, to plants and suppliers and helps them respond to the new challenges created by today's e-business environment. eMPower products are available in several solution sets — each comprising a family of advanced applications for both mechanical and electronics manufacturing. These sets include: eM-Planner, eM-Plant, eM-Engineer, eMPower for Machining, and eMPower for Quality for most mechanical manufacturing environments; and eMPower PCB Assembly and Test, eMPower Box Build, and eMPower Execution Systems for electronics manufacturing.

Ensemble

Evans & Sutherland 600 Komas Drive Salt Lake City, UT 84108 Tel: (801) 588-1000 Fax: (801) 588-4500 E-mail: info@es.com http://www.es.com **Description:** Ensemble is the first complete, turnkey, PC-based image generation system. Ensemble II offers high polygon capacity for high 3-D feature density, physics-based atmospherics and sensor effects, and support for a variety of database formats. Ensemble also features E&S REALimage® technology-high-performance graphics for NT workstations; simulation-specific features; open architecture; off-the-shelf components; scalable in number and type of channels, pixel fill rate, and polygon capacity; and aggressive performance roadmap.

Enterprise Dynamics

Planetenbaan 21 3606 AK Maarssen The Netherlands Tel: 31 346 552500 Fax: 31 346 552451 E-mail: SimInfo@Enterprise Dynamics.com http://www.enterprisedynamics.com **Description:** Enterprise Dynamics is an object-oriented dynamic analysis and control system. The system consists of a powerful Enterprise Dynamics (E.D.)-Engine® and many building blocks grouped into E.D.-Suites®. An E.D.-Suite is configured for a specific field of expertise, to assist the modeling of a specific problem, branch, or area. Animations can range from 2-D flowcharts to true 3-D Virtual Reality models that empower imagination and creativity. Building blocks can be easily created, customized, and added into your personal E.D.-Suite. The creation or customization of E.D.-Suites has no technical limitations.

ExpertFit®

Averill M. Law & Associates 6601 East Grant R., Suite 110 Tucson, AZ 85717 Tel: (520) 795-6265 Fax: (520) 795-6302 E-mail: averill@simulation.ws http://www.averill-law.com

Description: ExpertFit's distribution-fitting methodology is based on 24 years of research and on extensive experimentation with 35,000 data sets. ExpertFit was developed by Dr. Averill M. Law, who is widely recognized as one of the world's foremost authorities on simulation and distribution fitting. ExpertFit has a comprehensive set of features that allow you to use 40 different distributions even if they are not in your simulation software; provides more than 30 high-quality graphs and four technically correct goodness-of-fit tests; allows multiple distributions on a plot; and allows batch-mode capability for analyzing a large number of data sets. ExpertFit can be configured to fit your particular needs through two modes of operation that allow you to configure ExpertFit to your background and to your application.

Extend

Imagine That, Inc. 6830 Via Del Oro, Suite 230 San Jose, CA 95119 Tel: (408) 365-0305 Fax: (408) 629-1251

E-mail: extend@imaginethatinc.com http://www.imaginethatinc.com

Description: By combining a core set of robust simulation capabilities with an extensible modular design, the Extend family of simulation tools offers unmatched modeling performance and versatility. Each of the four Extend products includes a core set of features such as an evolutionary optimizer, unlimited hierarchy, customizable animation, model navigator, COM/ActiveX automation, and ODBC communication. Each Extend product adds unique capabilities to the underlying simulation engine.

Factory Explorer®

Wright, Williams & Kelly 6200 Stoneridge Mall Rd 3rd Floor Pleasanton, CA 94588 Tel: (925) 399-6246 Fax: (925) 396-6174

http://www.wwk.com

Description: Factory Explorer® is a unique software tool that answers critical manufacturing questions helping you to know optimal factory size, how to reduce cycle time and product costs, locations of factory bottlenecks, and time trends in inventory levels. Factory Explorer® is supported by the world's leading operational modeling software and services provider, Wright, Williams & Kelly. Whether you need a software tool or a staff of on-site manufacturing experts, we provide the most cost-effective solutions to your business needs.

FlexSim

FlexSim Software Products, Inc. 1577 N Technology Way, Bldg. A Orem, Utah 84097 Tel: (801) 224-6914 Fax: (801) 224-6984 Email: sales@flexsim.com **Description:** FlexSim is a PC-based simulation software application used by businesses and organizations around the globe for modeling, simulation, and visualization of their systems and processes. Whether you need to model manufacturing, material handling, logistics, administration, or virtually any type of process, FlexSim is the tool of choice. Modeling objects can be customized exactly to match the processes you manage. Every model in FlexSim can be viewed in 3-D virtual reality animation. If you are looking to improve and optimize the processes you manage, then you have come to the right place.

FlightViz

SimAuthor, Inc. 4840 Pearl East Circle Suite 201E Boulder, CO 80301-6115 Tel: (303) 545-2132 Fax: (303) 545-2133

http://www.simauthor.com

http://www.flexsim.com

Description: FlightViz is an interactive visualization environment, which instantly creates real-time, interactive, high-fidelity graphical depictions of flight and simulator data. Several different methods of data visualization are available ranging from graphs, spreadsheets, and navigational charts to synchronized video and detailed three-dimensional graphic animations of the flight.

GoldSim

GoldSim Technology Group 22516 SE 64th Place, Suite 110 Issaquah, WA 98027 Tel: (425) 295-6985 Fax: (425) 642-8073 http://www.goldsim.com **Description:** GoldSim is a general-purpose probabilistic simulation package that can be used by a wide variety of professionals. The software is highly graphical (users literally draw influence diagrams of their models), extensible, and flexible. It has a powerful Monte Carlo simulation engine and can simultaneously represent both continuous and discrete dynamics to support simulation of complex, dynamic systems. Powerful addin modules facilitate applications in various industries.

HighMAST™

Highpoint Software Systems, LLC S42 W27451 Oak Grove Lane Waukesha, WI 53189 Tel: (262) 893-5400 Fax: (262) 650-0781

E mail: info@highpointsoftware.com http://www.highpointsoftware.com **Description:** HighMAST[™] is our flagship product. It is a robust and powerful object oriented simulation framework, written to an open architecture in C# for .NET. Many vendors will tell you their products are object-oriented, but if you don't have full visibility into them, you're still probably making compromises.

HLA LabWorks

AEgis Technologies Group, Inc. 631 Discovery Drive Huntsville, AL 35806 Tel: (256) 922-0802 Fax: (256) 922-0904

http://www.aegistg.com

Description: HLA LabWorks is an AEgis COTS software tool suite that will dramatically reduce High Level Architecture (HLA) simulation/federation development costs. HLA LabWorks consists of the following components: OMDT Pro automates building HLA models; OMDT JMASS will shorten the time required to document a JMASS team's Simulation Object Model (SOM); FedProxy will enable you to generate a working HLA federate from any HLA Federation Object Model (FOM) or Simulation Object Model (SOM) fast and easy; Analysis Station is an HLA Federation Simulation Data Collection (logging) Tool providing the capability for real time (and recording) statistical plotting and data playback; FedDirector makes managing the complete life cycle of any HLA federation from creation through resignation easy and intuitive; The Scenario Generation Toolset is designd to centralize the scenario development process for distributed simulation environments ad maximize the ability to reuse scenario specifications; OMni gives simulations the ability to establish a Federation Object Model independent interface to the HLA Runtime Infrastructure (RTI).

iGrafx

Corel Corporation 1600 Carling Avenue Ottawa, Ontario K1Z 8R7 Canada Tel: (800) 772-6735

Fax: (613) 761-9176 Email: custserv@corel.com http://www.igrafx.com **Description:** iGrafx is a comprehensive suite of business management tools that help organizations understand, analyze, and optimize their processes. iGrafx creates a teambased collaborative process visualization and analysis environment that enables you to gain and sustain leadership and increase your return on investment. Organizations realize that their competitive advantage lies in implementing and managing an effective process to deliver products and services. Our process management solution will assist in reducing costs and increasing utilization, allocation, and deployment of resources. iGrafx transforms business owners into process owners by providing the necessary tools to engage in successful decision making to communicate powerful recommendations.

Isis™

CAE 8585 Côte de Liesse Saint-Laurent, Quebec Canada H4T 1G6 Tel: (514) 341-6780 Toll free: (800) 760-0667

Fax: (514) 341-7699 http://www.cae.com Description: Isis™, CAE's modular instructor station, has been designed to assist the instructor in controlling the training environment while monitoring all aspects of trainee and simulator performance. Available on Linux, Unix, and Windows platforms, its modular design allows it to be easily integrated into any existing simulator environment or perfectly coupled with CAE's simulation environment. All standard windowing features are supported. The windows can be moved, resized, pushed, popped, stowed, and closed as required. Graphic pages such as system schematics and virtual panels can be easily panned and zoomed for maximum versatility.

Maya

Alias Systems 210 King Street East Toronto, Ontario M5A 1J7 Canada Tel: (416) 362-9181

Fax: (416) 369-6140 Toll free: (800) 447-2542 http://www.alias.com **Description:** Maya is the first choice for digital content creators producing world-class games, 3-D animation, and visual effects. It is the world's most comprehensive production solution for 3-D artists in animation and visual effects, from initial concept right through to final rendered image. Maya is available for Windows XP Professional, Windows 2000 Professional, Mac OS X, IRIX, and Linux.

Micro Saint Sharp

Micro Analysis & Design 4949 Pearl East Circle, Suite 300 Boulder, CO 80301 Tel: (303) 442-6947 Fax: (303) 442-8274 http://www.maad.com Description: Built off the very successful Micro Saint engine, but completely redesigned to be faster, modular, and more powerful! Micro Saint Sharp is a general purpose, discrete-event simulation software tool. Micro Saint Sharp's intuitive graphical user interface and flow chart approach to modeling make it a tool that can be used by generalists as well as simulation experts. Micro Saint has proven to be an invaluable asset in both small businesses and Fortune 500 companies and in many areas including the military, human factors, health care, manufacturing, and the service industry. Micro Saint Sharp's power, flexibility, and tools for optimization make it the simulation tool of choice for any organization. With a computer model of your process built in Micro Saint Sharp, you can begin to get the answers to your "what if" questions. What if I change the way humans work with the system? What if I change my resource mix? What if I rearrange the process? Find the answers with Micro Saint Sharp quickly and completely for systems of all sizes, shapes, and complexities.

MineSim™

Systemflow Simulations, Inc. 6366 Guilford Avenue, Suite 300 Indianapolis, IN 46220 Tel: (317) 466-0664 Fax: (317) 466-0821 http://www.systemflow.com/minesim

Description: MineSim™ is an interactive web-based simulation of a portion of an underground mine. This simulator was developed by Systemflow Simulations, Inc. You can use the public version of MineSim to learn about simulation, to explore the topic of underground mining, or just to have some fun. MineSim is written in Java and runs automatically as an applet on your computer under Microsoft Internet Explorer (IE) version 5.0 or later. There is no charge for using this software, but we would appreciate it if you would email us your comments.

MRMAIDE

Ram Laboratories, Inc. 10525 Vista Sorrento Pkwy Suite 220 San Diego, CA 92121 Tel: (858) 677-9207 http://ww.ramlabs.com **Description:** MRMAIDE is a mixed-resolution modeling aide used to enable the development of multi-resolution simulations and federations. MRMAIDE supports aggregation and abstraction at the entity, component, and federate levels.

MSC.ADAMS®

MSC.Software Corporation 2 MacArthur Place Santa Ana, CA 92707 Tel: (714) 540-8900 Fax: (714) 784-4056 Toll free: (800) 328-4672

http://www.mscsoftware.com

Description: By using the MSC.ADAMS® suite of software you are able to simulate, understand, and quantify the performance of your mechanical systems before you commit to expensive hardware prototypes or conduct numerous physical tests. By adding industry-specific products onto this motion simulation foundation, manufacturers are able to capture their industry knowledge, utilize templates tailored to their engineering processes, and develop consistent virtual prototypes that guide them in making critical design decisions.

ProcessModel

ProcessModel, Inc. 32 West Center, Suite 301 Provo, UT 84601 Tel: (801) 356-7165 Fax: (801) 356-7175

Email: info@processmodel.com http://www.processmodel.com **Description:** ProcessModel helps analyze mission-critical processes for designing and improving business process. By using a simple flowchart interface users can perform a detailed analysis of processes and accurately predict the impact of changes to the system. Advanced features include an intelligent optimization module, a value-added time selectro, and a resource shift editor. ProcessModel also provides a detailed statistical report which allows you to directly compare your existing process with proposed fixes.

ProModel

ProModel Corporation 556 East Technology Ave. Orem, UT 84097 Tel: (801) 223-4600 Fax: (801) 226-6046 Email: sales@promodel.com http://www.promodel.com Description: The ProModel Optimization Software Suite is simulation-based software for evaluating, planning, or designing manufacturing, warehousing, logistics, and other operational and strategic applications. This easy-to-use software allows you to build —without risk— computer representations and test scenarios to find the best solutions. The animation and graphical reports are powerful tools for visualizing, understanding, and improving your most critical business challenges. ProModel can help build custom solutions, including powerful applications linked to ERP and other data systems. The ProModel predictive technology offers you the power of creating customized front- and back-end interfaces that communicate directly with ProModel. Using Microsoft Visual Basic (or any other ActiveX-enabled language), you can add capabilities to ProModel products including: customized user interface with table inputs; custom-designed parameter screens; automatic model creation from external data sources (e.g. Excel spreadsheets, databases, or ASCII text files); and software execution from another application.

PSpice

OrCad Technologies 2655 Seely Avenue San Jose, CA 95134 Tel: (408) 943-1234 http://www.orcad.com **Description:** PSpice is a full-featured simulator for serious analog designers, providing advanced simulation solutions for analog and mixed-signal environments. Analog and mixed-signal designers rely on PSpice simulation solutions for accurate circuit simulations and the latest in simulation technology. With its sophisticated internal models, you can simulate everything from high-frequency systems to low-power IC designs. Draw on the large library of models for off-the-shelf parts, or create models for new devices from their data sheets. Fully understand and explore the relationships in your design with "what if" scenarios and design analyses.

RELAP5 R/T

Data Systems & Solutions 12100 Sunset Hills Rd Suite 310 Reston, VA 20190 Tel: (703) 375-2800

Fax: (703) 375-2959 Email: info@ds-s.com http://www.ds-s.com **Description:** RELAP5 R/T is a very high fidelity real-time model for diverse applications ranging from nuclear reactor thermalhydraulics to complex feedwater systems. RELAP5 R/T is the world's most widely respected safety analysis code. Recent advances in operating systems and ever expanding hardware capabilities have enabled Data Systems & Solutions to team with Idaho National Engineering Labs to successfully bring RELAP5 into the real-time simulator environment. This model has been successfully benchmarked in real time for all operating and transient conditions. This new version of RELAP5 provides the flexibility to analyze a full range of transient plant conditions and predict accurate results under all modes of plant operation. Embedded in RELAP5 R/T is the Nodal Neutronics Kinetics Module (NNKM), a 3-D, full two group, engineering grade neutronics model. The NNKM model is supplied with tools to support the user in producing cycle-specific core lifes.

Risky Project

Intaver Institute, Inc. 303, 6707, Elbow Drive S.W. Calgary, Alberta, T2VOE5 Canada

Tel: (403) 692-2252 Fax: (403) 259-4533 Email: sales@intaver.com http://www.intaver.com **Description:** Risky Project is a project planning, quantitative risk analysis and performance measurement software that project managers can use to simulate and implement projects with multiple risk and uncertainties. Risky Project analyzes project schedule and risk lists together, performs Monte Carlo simulations, and calculates the chance that a project will be completed within a given budget and period of time.

ROSE

CAE 8585 Côte de Liesse Saint-Laurent, Quebec Canada H4T 1G6 Tel: (514) 341-6780 Toll free: (800) 760-0667 Fax: (514) 341-7699 http://www.cae.com Description: With ROSE® our engineers and customers can design, model, test, and validate ship systems while reducing ship and system developments costs and schedules. CAE's ROSE® is a graphical programming tool for the development of simulation models and control system software. ROSE® provides a user-friendly object-oriented environment for developing high-fidelity real-time simulation models of complex systems as well as control software. ROSE® is being used as a simulation-based design tool on the U.K. Royal Navy's new Astute-class submarine program for design verification and boat performance analysis.

RT-LAB

Opal-RT Technologies Inc. 1751 Richardson, Suite 2525 Montréal, Québec H3K 1G6 Canada Tel: (514) 935-2323 Fax: (514) 935-4994 Toll free: (877) 935-2323 E-mail: info@opal-rt.com

http://www.opal-rt.com

Description: RT-LAB is an industrial grade software package for engineers who use mathematical block diagrams for simulation, control, and related applications. RT-LAB provides tools for running and monitoring your simulations or controls on various runtime targets. An open architecture allows RT-LAB to work with popular diagramming tools and RT-LAB also works with popular viewers, and with programming languages including Visual Basic™ and C++. The runtime code is compact and efficient, with excellent real-time characteristics. This means that it runs well on older 386/486 computers and gives blazing performance on newer machines. RT-LAB is the first fully scalable simulation and control package, since it allows you to divide models to run in parallel on your choice of either a network of standard PCs or on SMP (symmetric multi-processor) machines. RT-LAB works with a wide range of commercial I/O. Opal-RT has spent years of research to make sure that parallel execution does not subtly alter model behavior, introduce real-time glitches, or cause dead-locks.

SIM4ME

SimSci Esscor 26561 Rancho Parkway South Lake Forest, CA 92630 Tel: (949) 455-8150 Email: info.us@simsci.com http://www.simsci-esscor.com Description: SIM4ME Service Solutions provide an efficient means of getting technology implemented rapidly to help solve process design and operations issues and improve plant profitability. Using service solutions, your company will reduce valuable lead time, lower costs, increase profitability, and maximize the use of rigorous predictive models to aid efficient operations. SIM4ME Service Solutions also offer process companies the unique ability to create software interfaces and systems integration with in-house and third-party software, develop complex modeling simulations and optimization tools, and provide ongoing project support, comprehensive risk analysis, and consulting services.

Simcad Pro

CreatASoft, Inc. 1212 S. Naper Blvd., Suite 119 Naperville, IL 60540 Tel: (630) 428-2850 x. 204

Fax: (630) 357-2590 E-mail: sales@createasoft.com http://www.createasoft.com **Description:** Simcad Pro is a process simulation and modeling tool, designed to build a virtual copy of your business from the top down. Customize your model by importing your own images, clip art, and CAD files into the model. With Simcad Pro, you can build a small, but realistic replica of your business that behaves like the real world model. Modify it, redesign it, or simply experiment with it; the possibilities are endless.

SimFlex™

Production Modeling Corporation Three Parklane Blvd Suite 1006 West Dearborn, MI 48126 Tel: (313) 441-4460 Fax: (313) 441-6098 *Description:* SimFlex[™] is a product of unique, powerful, and revolutionary supply chain simulation technology. This supply chain simulation software enables companies to simulate supply chain dynamics, and thereby evaluate multiple planning criteria and real-world variations. The accuracy of the results generated by SimFlex[™] enables companies to make strategic and cost-conscious decisions concerning complex supply chain issues intelligently, nimbly, and quantitatively. Additionally, companies are able to understand, and hence proactively anticipate, potential impacts on the supply chain network as various market conditions change.

SimPort

SAIC 10260 Campus Point Drive San Diego, CA 92121 Toll free: 1-800-430-7629 http://www.saic.com

http://www.pmcorp.com

Description: SimPort is the complete object-oriented real-time simulation environment. SimPort includes modeling tools, an Instructor Station, Real-Time Executive, Panel Graphics Emulation, and a powerful Graphical Engineering Editor to allow you to meet your present simulation needs and provide you with the environment and tools for future upgrades. SimPort is the first simulation environment developed specifically for the Microsoft Windows NT operating system. Because development did not include any ported "legacy" code from previous operating systems, SimPort can take full advantage of all the features of the Microsoft Windows development environment.

SIMPROCESS

CACI Products Company 1011 Camino Del Rio South Suite 230 San Diego, CA 92108 Tel: (619) 542-5228

Fax: (619) 692-1013 http://www.simscript.com Description: SIMPROCESS® is a hierarchical integrated process simulation software package that combines Process Mapping, Flow Charting, Discrete Event Simulation, and ABC (Activity Based Costing) in a single, easy to use tool. SIMPROCESS provides non-programmers with ready-made blocks for building logic-based models supporting decisions in your BPM (Business Process Management), Process Improvement, Six Sigma and BAM (Business Activity Monitoring) initiatives.

SIMSCRIPT II.5®

CACI Products Company 1011 Camino Del Rio South Suite 230 San Diego, CA 92108

Tel: (619) 542-5228 Fax: (619) 692-1013 http://www.simscript.com Description: SIMSCRIPT II.5® is a powerful Simulation Language with English-like syntax for building discrete event and/or continuous simulation models. Simulation Studio (SimStudio) provides programmers with Integrated Development Tools for flexibility in building portable, high-fidelity, large-scale simulation modeling applications with excellent interactive GUI (Graphical User Interface) and animated

SimSheet

Orlando Software Group, Inc. 801 International Pkwy, 5th Floor Lake Mary, FL 32746 Tel: (407) 562-1999 Fax: (407) 562-2001 http://www.osgi.com Description: SimSheet adds simulation capabilities to spreadsheets for planning, analysis, and general-purpose applications and is designed to work in conjunction with Microsoft Excel™. SimSheet offers current Microsoft Excel users an intuitive interface for adding dynamic simulation to otherwise static spreadsheets. The design objective is to provide a power tool, which is both easy to use and affordable for general spreadsheet application use and is intended primarily for general business professionals who want to enhance their planning and analyzing capabilities. SimSheet provides the user capability to make better decisions by accurately modeling the parameters being used to make long-range budgeting, financial, and forecasting decisions.

Simsmart

Simsmart, Inc. 6 Place du Commerce, Suite 100 Brossard, Quebec J4W 3J9 Canada

Tel: (450) 923-0400 Fax: (450) 923-0038

Email: solution@simsmart.com http://www.simsmart.com Description: Simsmart Inc, founded in 1986, is a provider of process systems design software, process performance analysis, process training solutions, and related application engineering. As a result of extensive research and development, our multidiscipline physics-based dynamic modeling and simulation design and training tools, called the Engineering Suite and TPTS (Total Platform Training System), are used today in a wide range of military and industrial applications where liquids and gas processes, Heating Ventilating, and Air Conditioning (HVAC), associated AC/DC electrical systems and related process controls are involved. Our two products provide advanced engineering and cost effective solutions for both new constructions and retrofits.

SimSuite Pro®

GSE Systems, Inc. 9189 Red Branch Road Columbia, MD 21045 Tel: (410) 772-3500 Fax: (410) 772-3611

http://www.gses.com

Description: SimSuite ProTM provides an integrated software suite which is used to build, test, and run simulation models — dynamically and in real time. While these models are widely used for process operator training, their fidelity and ease of modification makes them an excellent foundation for control system design, process evaluation, engineering studies, operating procedure validation, and hazard analysis. When your plant is faced with a change in one of these areas, simulation technology from GSE Systems can help.

SIMUL8

SIMUL8 Coroporation 225 Franklin Street 26th Floor Boston, MA 02110 Tel: (800) 547-6024 Fax: (800) 547-6389

Email: sales-team@simul8.com http://www.simul8.com Description: SIMUL8 Standard is an integrated environment for working with simulation models. The powerful language and model visualization capabilities enable you to create the accurate, flexible, and robust simulations you need in less time. SIMUL8 Corp have used industry leading software developers to build a business simulator capable of the most detailed simulations. SIMUL8 is supported to the highest standards. SIMUL8 Professional is the most economical way to license the very powerful Plug-in series for SIMUL8. Plug-ins enhance SIMUL8's communication with other packages, facilitate the exchange of simulations, and increase SIMUL8's functionality.

Simulink

The Mathworks, Inc. 3 Apple Hill Drive Natick, MA 01760-2098 Tel: (508) 647-7000 Fax: (508) 647-7001 http://www.mathworks.com

Description: Simulink is an interactive tool for modeling, simulating, and analyzing dynamic, multi-domain systems. It lets you accurately describe, simulate, evaluate, and refine a system's behavior through standard and custom block libraries. Simulink integrates seamlessly with MATLAB, providing you with immediate access to an extensive range of analysis and design tools. These benefits make Simulink the tool of choice for control system design, signal processing system design, communications system design, and other simulation applications.

SLX

Wolverine Software Corporation 3131 Mount Vernon Ave. Alexandria, VA 22305-2640 Tel: (703) 535-6760 Fax: (703) 535-6763 Toll free: (800) 456-5671 E-mail@wolverinesoftware.com http://www.wolverinesoftware.com Description: SLX is a new approach to simulation modeling designed to be a tool you can count on to accurately portray your system and meet your project goals. SLX software is designed to meet the needs of modelers who want flexibility and extensibility, as well as the Wolverine hallmark of extremely high performance. SLX takes a layered approach to simulation modeling, making it easty to jump from layer to layer as follows: The kernel layer provides a solid foundation of computational and programming capabilities; the simulation and statistical primitives layer gives you an essential set of simulation mechanisms like event scheduling, generalized wait-until, random variate generation, and statistics collection; and the general-purpose modeling layer provides basic building blocks for modeling a wide variety of systems at varying levels of detail. Application-specific packages are available for various industries such as health care, manufacturing, transportation, or communications. Packages for non-simulationists can be developed using custom front-end interfaces.

Stat::Fit

Geer Mountain Software Corp. 104 Geer Mountain Road South Kent, CT 06785 Tel: (860) 927-4328 Fax: (860) 927-1614 Email: statfit@geerms.com **Description:** Stat::Fit statistically fits your data to the most useful analytical distribution. Its operation is intuitive, yet its help file extensive. The Auto::Fit function automatically fits continuous distributions, provides relative comparisons between distribution types, and an absolute measure of each distribution's acceptability. The Export function translates the fitted distribution into specific forms for simulation software. Features include descriptive statistics, parameter estimates, goodness of fit tests, graphical analysis, random variate generation, export to simulation products, and more.

Supply Chain Builder

http://www.geerms.com

Simulation Dynamics, Inc. 416 High Street
Maryville, Tennessee 37804
Tel: (865) 982-7046
Fax: (865) 982-2813
Email: info@simulationdynamics.com
http://www.simulationdynamics.com

Description: Supply Chain Builder is the software framework developed and used by SDI for building supply chain simulations. Its architecture gives us customizable supply chain building blocks and proven constructs, along with a database that makes possible the development of complex models with high fidelity. Supply Chain Builder is used to model entire networks of suppliers, plants, distribution centers, and customers. With configurable outputs and integrated optimization capabilities, it is a power tool that enables us to analyze the smallest supply chains to the largest, most complex supply chains.

V8-Line

Visual8 Corporation 8700 W. Bryn Mawr Suite 800 South PMB #8712 Chicago, IL 60631 Tel: (800) 878-3373 E-mail: sales@Visual8.com http://www.visual8.com **Description:** Visual8 Corporation is pleased to announce the release of V8-Line 4.0. This version is the next generation of our successful V-8 Line Product. This release is superior to earlier version — running models faster, providing improved model development tools and more detailed output results. Release 4.0 provides the user with additional levels of control and flexibility. Improved areas include resource definitions, task time distributions and flow of orders through the system. Additionally, the product includes improved input logic, which allows users to rapidly produce new product definitions.

WarpIV Framework

Ram Laboratories, Inc. 10525 Vista Sorrento Pkwy Suite 220 San Diego, CA 92121 Tel: (858) 677-9207 http://ww.ramlabs.com **Description:** WarpIV is a framework that supports simulation and information management applications across distributed networks and parallel nodes in a scalable manner. WarpIV provides a modeling framework; advanced time management algorithm; shared memory communicator; and promotes interoperability, composability, and high performance.

WebMentor LMS™

Avilar Technologies, Inc. 8750-9 Cherry Lane Laurel, MD 20707-6208 Tel: (301) 725-7014 Fax: (301) 725-0980 Toll free: (888) 873-7014 http://www.avilar.com

Description: WebMentor is a comprehensive eLearning solution, based on a completely scalable, interoperable, flexible, and extensible infrastructure. It incorporates several advanced features that are unique within the industry or exceptional in the depth and breadth of their design and implementation. With WebMentor, corporations can track and manage a broad range of learning activities with features like employee registration and post-testing across the entire spectrum of offered courses. WebMentor enables organizations to measure their learning effectiveness, competency, impact on business objectives, and profitability.

Witness

Lanner Group, Inc. 11000 Richmond Avenue Suite 680 Houston, TX 77042 Tel: (713) 532-8008 Fax: (713) 532-3732 http://www.lanner.com Description: Witness simulation software is the most advanced in its field, enabling dynamic simulation modeling of business activities and throughputs. Highlights include: Six Sigma Support—output to MINITAB, Six Sigma optimisation algorithms, project guidance and more; new comprehensive XML interface in SIMBA to allow multiple product linkage and support major partnership opportunity; and database wizard/data module structure for easy linkage and manipulation of data from any OLE DB database source (includes ORACLE, SQL Server, Access, etc).

II. Modeling & Simulation Organization Guide

The ACM Special Interest Group on Simulation (SIGSIM)

Contact:

One Astor Plaza 1515 Broadway, 17th Floor New York, New York 10036 Tel: (212) 869-7440 Toll free: (800) 342-6626 Fax:(212) 944-1318 E-mail: SIGS@acm.org http://www.acm.org/sigsim SIGSIM is the ACM Special Interest Group on Simulation. Its mission is to promote and disseminate the advancement of the state of the art in simulation and modeling. By nature extremely cross-disciplinary simulation and modeling activities cut across a broad range of interests. SIGSIM is committed to provide new exceptional electronic services to its members (and to the simulation community at large). SIGSIM actively seeks to provide professional services in a variety of ways, including sponsorship of the Winter Simulation Conference and the Workshop on Parallel and Distributed Simulation.

Air Force Agency for Modeling and Simulation (AFAMS)

Contact:

Email: afams@afams.af.mil http://www.afams.af.mil/ The Air Force established the Air Force Agency for Modeling and Simulation (AFAMS) in June 1996. Its mission is to coordinate the growing requirement for modeling and simulation across the Air Force by implementing AF/Joint/DoD M&S policy and standards; supporting corporate AF M&S planning, requirements, and investments; supporting establishment, transition, and integration of major AF M&S initiatives and programs; and supporting AF decision making and mission execution.

The Arizona Center for Integrative Modeling and Simulation (ACIMS)

Contact:

http://www.acims.arizona.edu/

ACIMS is devoted to research and instruction that advances the use of M&S as means to integrate disparate partial solution elements into coherent global solutions to multidisciplinary problems. To do this, the Center will focus on advancing the concepts, tools, and methodology of M&S so that it can make the enormous computation power on the horizon applicable to emerging problems requiring multidisciplinary solutions.

Battle Command, Simulation, and Experimentation Directorate (DAMO-SB)

Contact:

HQDA, DCS G3 (DAMO-ZS) 400 Army Pentagon Washington, DC 20310-0400 Tel:(703) 601-0005 http://www.amso.army.mil DAMSO-SB provides the vision, strategy, oversight, integration, training, and management of Modeling and Simulation activities across all M&S domains and environments.

Core Competencies:

- Formulate, develop, and promulgate the Army's M&S policies
- Ensure the integration of M&S across Army M&S domains
- Assist senior leaders in properly resourcing Army M&S programs
- Foster reuse and development of common M&S components and tools
- Act as focal point for Army M&S matters with the Joint Staff, Combatant Commanders, DARPA, DMSO, Services, DoD Agencies and OSD staff elements
- Establish and execute simulation operations (Functional Area (FA)/Civilian Program (CP)) Proponency)
- Executive agent for Simulation and Modeling for Acquisition, Requirements and Training (SMART)

The United States Department of Defense Modeling and Simulation Office (DMSO)

Contact:

1901 N. Beauregard Street Suite 500 Alexandria, VA, 22311 Tel: (703) 998-0660 Fax: (703) 998-0667 Fax E-mail: ask@dmso.mil http://www.dmso.mil/public The DMSO is the catalyst organization for DoD modeling and simulation and ensures that M&S technology development is consistent with other related initiatives. The DMSO performs those key corporate level functions necessary to encourage cooperation, synergism, and cost-effectiveness among the M&S activities of the DoD components. The DMSO supports the warfighter by leading a defense-wide team in fostering the interoperability, reuse, and affordability of M&S and the responsive application of these tools to provide revolutionary warfighting capabilities and improve aspects of DoD operations.

Dutch Benelux Simulation Society (DBSS)

Contact

Noordeindseweg 61, 2651 Le Berkel en Rodenrijs The Netherlands Tel: 31 (0)10 51 12714 Fax: 31 (0)10 51 13883

E-mail: L.Dekker@pa.twi.tudelft.nl http://www.eurosim.info DBSS was founded in July 1986 in order to create an organization of simulation professionals within the Dutch language area. DBSS has actively promoted creation of similar organizations in other language areas. DBSS is a member of EUROSIM and works in close cooperation with its members and is further affiliated with SCS International, IMACS, the Chinese Association for System Simulation, and the Japanese Society for Simulation Technology.

EUROSIM

Contact:

http://www.eurosim.info/

EUROSIM, the Federation of European Simulation Societies, was set up in 1989. The purpose of EUROSIM is to provide a European forum for regional and national simulation societies to promote the advancement of modeling and simulation in industry, research, and development. EUROSIM's journal EUROSIM Simulation News Europe publishes information on simulation news in Europe and trends in simulation, including reports of EUROSIM's member societies. Simulation Practice and Theory, EUROSIM's scientific journal, publishes high-quality contributions on modeling and simulation. EUROSIM organizes the three annual EUROSIM Congresses and coorganizes and co-sponsors conferences on simulation.

French Association for Artificial Intelligence (Association Français pour Intelligence Artificielle)

Contact:

http://www.afia.lri.fr

Since its creation in 1989, AFIA has been a focal point for the French-speaking artificial intelligence community. AFIA organizes conferences, runs colleges and workgroups, and acts on behalf of the French AI community with the country's public authorities and ECCAI, the European Coordinating Committee on AI.

The International Marine Simulator Forum (IMSF)

Contact:

http://www.imsf.org

The objectives of the Forum are to contribute to improvements in training, and operation in the maritime industry through the use of simulation; to provide an effective medium for the interchange of ideas and experience by members of the Forum; to develop performance criteria for the use of simulators in maritime training and research; and to collaborate with other organizations involved in maritime simulation.

The Italian Society for Computer Simulation (ISCS)

Contact:

Università di Roma "Tor Vergata" Via della Ricerca Scientifica I-00133, Roma, Italy Tel: +39 6 7259 4477

Fax: +39 6 2020 519 Email: grassi@info.utovrm.it http://www.eurosim.info/ ISCS is a scientific, non-profit association of members from industry, university, education, and several public research institutions with common interest in all fields of computer simulation. Its primary purpose is to facilitate communication among those engaged in all aspects of simulation for scientific, technical, or educational purposes. ISCS is member of EUROSIM, the Federation of European Simulation Societies.

Japan Society for Simulation Technology (JSST)

Contact:

http://www.soc.nii.ac.jp/jsst/

The Society was established in 1981 to form a forum for the exchange of information about analog computer technology and its applications. The JSST is a registered society recognized by the Science Council of Japan with about 700 active members, including corporate and student members. The JSST provides a forum for exchange and dissemination of the information on widespread topics of simulation technology from hardware to software.

Latvian Simulation Society (LSS)

Contact

Riga Technical University 1, Kalku Street LV-1658 Riga, Latvia Tel: +371-7089514 Fax: +371-7820094

Fax: +371-7820094 Email: merkur@itl.rtu.lv http://www.eurosim.info LSS was founded in 1990 as the first professional simulation organization within the republics of the former Soviet Union. Currently it consolidates about 40 members, mainly from the academic world. It reflects the fact that today's simulation activities in Latvia are concentrated mostly at universities. The level of these activities is traditionally high at the Riga Technical University and the Latvian University.

McLeod Institute of Simulation Sciences (MISS)

Contact:

http://www.simulationscience.org/

The McLeod Institute of Simulation Sciences (MISS) is an initiative of the Society for Modeling and Simulation International (SCS). The MISS consists of cooperating Centers active in professionalism, research, education, and knowledge dissemination in the modeling and simulation (M&S) domain. The MISS aims to provide an organizational structure that will serve to integrate and enrich, within its Centers, the activities of modeling and simulation expertise throughout the world.

Military Operations Research Society

Contact:

1703 N. Beauregard St, Suite 450 Alexandria, VA 22311 Tel: (703) 933-9070 Fax: (703) 933-9066

Email: morsoffice@mors.org

http://www.mors.org

To enhance the quality and usefulness of military operations research, the Military Operations Research Society endeavors to understand and encourage responsiveness to the needs of the user of military operations research; provide opportunities for professional interchange; educate members on new techniques and approaches to analysis; provide peer critique of analyses; inform and advise decision makers on the potential use of military operations research; encourage conduct consistent with high professional and ethical standards; recognize outstanding contributions to military operations research; and assist in the accession and development of career analysts.

Modelling and Simulation Society of Australia and New Zealand (MSSANZ)

Contact:

http://www.mssanz.org.au/index.html

The aims of the Society are to promote, develop, and assist in the study of all areas of modeling and simulation. The Society has more than 500 members from 50 countries, including Australia, Canada, China, France, Germany, Japan, New Zealand, the Netherlands, South Africa, Spain, Switzerland, the United Kingdom, and the United States. Members are from a wide range of professional disciplines including hydrology, agricultural science, economics, engineering, atmospheric science, ecology, and many others.

National Training Systems Association (NTSA)

Contact:

2111 Wilson Boulevard, Suite 400 Arlington, VA 22201 Tel: (703) 247-9471 Fax: (703) 243-1659 Email: prowe@ndia.org http://www.trainingsystems.org NTSA provides the training, simulation, related support systems, and training services industries a focused, formal organization to represent and promote their business interests in the market place. The Association provides a forum to communicate the full capability and broad characteristics of all of the elements of training systems and services to include associated support services. Founded in 1988 as a non-profit corporation, the Association fosters communication between the training agencies regarding requirements, procurement issues, and policies. An important aim of NTSA is to see that all aspects of training systems development and training services requirements are highlighted as independent and important "line items" in the overall planning, programming, budgeting and acquisition process.

Navy Modeling and Simulation Management Office (NAVMSMO)

Contact:

2000 Navy Pentagon PT 5486 Washington, DC 20350-2000 Tel: (703) 601-1414 http://navmsmo.hg.navy.mil/ The role of NAVMSMO is to provide centralized management of Navy M&S, coordinate M&S efforts across functional areas, and develop policies and procedures necessary for M&S standardization within the Navy. The NAVMSMO and the Marine Corps M&S Management Office (MCMSMO) serve as the single points of contact for M&S for the Navy and Marine Corps respectively. Together they comprise one of three Service Component Modeling & Simulation Management Offices (MSMO) required by DoD Directive 5000.59. Established in 1995, NAVMSMO serves as the Navy single point of contact on all Navy modeling and simulation matters, and for coordination with the other Services, DoD, Joint Staff, and other agencies' M&S organizations.

Simulation Interoperability Standards Organization (SISO)

Contact:

3280 Progress Drive Orlando, Florida 32826 Tel: (407) 882-1348 Fax: (407) 658-5059 Email: vlowe@ist.ucf.edu http://www.sisostds.org SISO focuses on facilitating simulation interoperability and component reuse across the DoD and other government and non-government applications. SISO seeks to serve the broad Modeling and Simulation (M&S) community by providing a forum for the interchange of new ideas, concepts, and technology through the Simulation Interoperability Workshops and the Conference on Behavior Representation in Modeling and Simulation; educating M&S practitioners and sponsors regarding implementation through tutorials held at the Workshops and through the quarterly publication of an online technical magazine titled *Simulation Technology*; and supporting the development of standards, practices, and guides for use in various applications.

Virginia Modeling Analysis and Simulation Center (VMASC)

Contact:

http://www.vmasc.odu.edu/

The Virginia Modeling, Analysis and Simulation Center is a not-for-profit collaborative enterprise center of Old Dominion University's College of Engineering and Technology. We are partnered with academia, industry, and government and our foci are modeling, simulation, and visualization research; development and education; and leveraging, promoting, and cultivating simulation technology expertise through industry, government, and academia.

III. Application Index

SOFTWARE TITLE COMPANY WEB SITE

Aerospace

20-sim Controllab Products B.V. http://www.20sim.com AEgis Technologies Group http://www.acslXtreme.com acslXtreme AnyLogic XI Technologies http://www.xjtek.com http://www.delmia.com DELMIA-DS PPR Delmia Corporation GoldSim GoldSim Technology Group http://www.goldsim.com http://www.mscsoftware.com MSC.ADAMS MSC.Software Corporation http://www.opal-rt.com RT-LAB Opal-RT

Agent-Based Simulation

AgentSheets, Inc. http://www.agentsheets.com/

Air Traffic Control

TowerView AAI Corporation http://www.aaicorp.com
FlightViz SimAuthor, Inc. http://www.simauthor.com

Automotive Systems

20-sim Controllab Products B.V. http://www.20sim.com MSC.ADAMS MSC.Software Corporation http://www.mscsoftware.com Delmia Corporation http://www.delmia.com **DELMIA-DS PPR** XI Technologies http://www.xjtek.com AnyLogic **WITNESS** Lanner Group, Inc. http://www.lanner.com RT-LAB Opal-RT http://www.opal-rt.com Tecnomatix Technologies, Inc. http://www.tecnomatix.com eMPower V8-Line Visual8 Corporation http://www.visual8.com

Biomedical and Medicine

@RISK Palisade Corporation http://www.palisade.com AEgis Technologies Group http://www.acslXtreme.com acslXtreme Micro Analysis & Design http://www.maad.com Micro Saint Sharp PROMODEL PROMODEL Corporation http://www.promodel.com

Business Applications

Analytica Lumina Decision Systems http://www.lumina.com http://www.arenasimulation.com Arena Rockwell Software DecisionPro Vanguard Software Corp http://www.vanguardsw.com Factory Explorer® Wright Williams & Kelly http://www.wwk.com GoldSim GoldSim Technology Group http://www.goldsim.com ProcessModel, Inc. http://www.processmodel.com ProcessModel PROMODEL PROMODEL Corporation http://www.promodel.com Intaver Institute, Inc. http://www.intaver.com Risky Project **SIMPROCESS** CACI Products Company http://www.simscript.com http://www.simul8.com

CAD/CAM/CIM

SIMUL8

http://www.silma.com CimStation Inspection SILMA, Inc.

SIMUL8 Corporation

Chemical Engineering

20-sim Controllab Products B.V. http://www.20sim.com http://www.acslXtreme.com acslXtreme AEgis Technologies Group SIMSMART, Inc. http://www.simsmart.com **SIMSMART**

Complexity, Complex Systems

CSIM19 Mesquite Software, Inc. http://www.mesquite.com Wolverine Software Corporation http://www.wolverinesoftware. SLX

com

Computer Networks

ALPHA/Sim® ALPHATECH, Inc. http://www.alphatech.com pescape@unina.it D-ITG Antonio Pescape

Control Engineering

AnyLogic XI Technologies http://www.xjtek.com Education

RT-LAB Opal-RT

Avilar Technologies, Inc. http://www.avilar.com WebMentor

Environmental

@RISK Palisade Corporation http://www.palisade.com

DECISIONEERING http://www.decisioneering.com Crystal Ball 2000

http://www.opal-rt.com

GoldSim GoldSim Technology Group http://www.goldsim.com

Financial Planning

DECISIONEERING Crystal Ball 2000 http://www.decisioneering.com

Geophysical Systems

@RISK http://www.palisade.com Palisade Corporation

Government

PROMODEL PROMODEL Corporation http://www.promodel.com

SimSheet Orlando Software Group, Inc. http://www.osgi.com

High Level Architecture

HLA LabWorks AEgis Technoloies Group, Inc. http://www.aegistg.com

MRMAIDE Ram Laboratories, Inc. http://www.ramlabs.com Ram Laboratories, Inc. http://www.ramlabs.com WarpIV Framework

Human Factors

Micro Saint Sharp Micro Analysis & Design http://www.maad.com

Industrial Engineering

RT-LAB Opal-RT http://www.opal-rt.com

SIMSMART SIMSMART, Inc. http://www.simsmart.com

Information Systems and Decision Support Systems

@RISK Palisade Corporation http://www.palisade.com GoldSim GoldSim Technology Group http://www.goldsim.com

ProcessModel ProcessModel, Inc. http://www.processmodel.com

Inventory and Production

SIMPROCESS CACI Products Company http://www.simscript.com

Management Science

@RISKPalisade Corporationhttp://www.palisade.comDecisionProVanguard Software Corphttp://www.vanguardsw.comArenaRockwell Softwarehttp://www.arenasimulation.com

SIMUL8 SIMUL8 Corporation http://www.simul8.com iGrafx Process Corel Corporation http://www.corel.com

ProcessModel ProcessModel, Inc. http://www.processmodel.com

Manufacturing

20-simControllab Products B.V.http://www.20sim.comALPHA/Sim®ALPHATECH, Inc.http://www.alphatech.com

CimStation InspectionSILMA, Inc.http://www.silma.comAutoModBrooks-PRIhttp://www.automod.comDELMIA-DS PPRDelmia Corporationhttp://www.delmia.comFlexSimFlexSim Software Products, Inc.http://www.flexsim.com

FlexSim Software Products, Inc. http://www.flexsim.com
WITNESS Lanner Group, Inc. http://www.lanner.com
Micro Saint Sharp Micro Analysis & Design http://www.maad.com
PROMODEL PROMODEL Corporation http://www.promodel.com

Arena Rockwell Software http://www.arenasimulation.com

SIMUL8 Corporation http://www.simul8.com
eMPower Tecnomatix Technologies, Inc. http://www.tecnomatix.com
bttp://www.tecnomatix.com
V8-Line Visual8 Corporation http://www.visual8.com
Factory Explorer® Wright Williams & Kelly http://www.wwk.com

Factory Explorer® Wright Williams & Kelly http://www.wwk.com
SimSuite Pro GSE Systems, Inc. http://www.gses.com

Marine Applications

SIMSCRIPT II.5 CACI Products Company http://www.simscript.com

ROSE CAE http://www.cae.com

Materials Handling

AutoModBrooks-PRIhttp://www.automod.comFlexSimFlexSim Software Products, Inc.http://www.flexsim.comWITNESSLanner Group, Inc.http://www.lanner.com

SimFlex Production Modeling Corporation http://www.pmcorp.com

Supply Chain Builder Simulation Dynamics http://www.simulationdynamics.com

Military

ALPHA/Sim® ALPHATECH, Inc. Mesquite Software CSIM19 XI Technologies AnyLogic

Micro Saint Sharp Micro Analysis & Design http://www.maad.com AEgis Technoloies Group, Inc. http://www.aegistg.com HLA LabWorks **SIMSMART** SIMSMART, Inc. http://www.simsmart.com

Mining

MineSim Systemflow Simulations, Inc. http://www.systemflow.com/minesim

http://www.alphatech.com

http://www.mesquite.com

http://www.xitek.com

Object-oriented Technology

SimPort Data Systems & Solutions http://www.ds-s.com

Operations Research

DecisionPro Vanguard Software Corp http://www.vanguardsw.com

Parallel and Distributed

ALPHA/Sim® ALPHATECH, Inc. http://www.alphatech.com

D-ITG Antonio Pescape pescape@unina.it

Power Plant Simulation

ANTHEM CAE http://www.cae.com COMET/CHORUS CAE http://www.cae.com http://www.cae.com Datapath X CAE http://www.cae.com Isis CAE http://www.cae.com **ROSE** CAE http://rnitech.com OpenSim RNI Technologies

DYNSIM SimSci-ESSCOR http://www.simsci-esscor.com

ALICES CORYS T.E.S.S. http://www.corys.com http://www.ds-s.com SimPort Data Systems & Solutions RELAP5 R/T http://www.ds-s.com Data Systems & Solutions

Process Engineering

iGrafx Process Corel Corporation http://www.corel.com Orlando Software Group, Inc. http://www.osgi.com SimSheet

Supply Chain Builder Simulation Dynamics http://www.simulationdynamics.com

eMPower Tecnomatix Technologies, Inc. http://www.tecnomatix.com V8-Line Visual8 Corporation http://www.visual8.com SimSuite Pro GSE Systems, Inc. http://www.gses.com

SimSci-ESSCOR http://www.simsci-esscor.com **DYNSIM ASCEND** SimSci-ESSCOR http://www.simsci-esscor.com **Queueing Systems**

ALPHA/Sim® ALPHATECH, Inc. http://www.alphatech.com

Risk Analysis

DECISIONEERING Crystal Ball 2000 http://www.decisioneering.com

Stat::Fit Geer Mountain Software http://www.geerms.com

Robotics

RT-LAB Opal-RT http://www.opal-rt.com

Scheduling

AutoMod **Brooks-PRI** http://www.automod.com Risky Project http://www.intaver.com Intaver Institute, Inc.

SimFlex Production Modeling Corporation http://www.pmcorp.com

Semiconductor Design

PSpice CADENCE http://www.cadence.com CSIM19 Mesquite Software http://www.mesquite.com **Brooks-PRI** AutoMod http://www.automod.com

Software Engineering

MRMAIDE Ram Laboratories, Inc. http://www.ramlabs.com

Statistics

ExpertFit http://www.averill-law.com Averill M. Law & Associates, Inc. Stat::Fit Geer Mountain Software http://www.geerms.com

System Dynamics

SimSheet Orlando Software Group, Inc. http://www.osgi.com

Telecommunications Systems

Analytica Lumina Decision Systems http://www.lumina.com AnyLogic XI Technologies http://www.xjtek.com D-ITG Antonio Pescape pescape@unina.it **PSpice CADENCE** http://www.cadence.com

Training Simulators

Agent Sheets AgentSheets, Inc. http://www.agentsheets.com

Isis CAE http://www.cae.com

Transportation and Traffic

MSC.ADAMS

acslXtreme

SIMSCRIPT

MSC.Software Corporation

AEgis Technologies Group

CACI Products Institute

http://www.mscsoftware.com

http://www.acslXtreme.com

http://www.acslXtreme.com

http://www.simscript.com

Virtual Prototyping

MSC.ADAMS

MSC.Software Corporation

acslXtreme

AEgis Technologies Group

http://www.mscsoftware.com

http://www.acslXtreme.com

Visualization, Graphics Animation

Agent Sheets AgentSheets, Inc. http://www.agentsheets.com

http://www.simauthor.com

SLX Wolverine Software Corporation http://www.wolverinesoftware.com
Maya Alias/WaveFront, Inc. http://www.aliaswavefront.com

Maya Alias/WaveFront, Inc. FlightViz SimAuthor, Inc.

Ensemble Evans & Sutherland http://www.es.com
ROSE CAE http://www.cae.com

Web-based Applications

WebMentor Avilar Technologies, Inc. http://www.avilar.com



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