

IMAGE 2005 TECHNICAL PAPERS INDEX

LOCATING A PAPER: For your convenience, within this Index papers are gathered into the Special Interest Groups (SIGs) for which they were accepted for presentation. To maintain consistency and avoid confusion only the Presenting Author is listed for each paper. Please be aware that the person who presented the paper at the conference may not be the paper's primary author. To locate a paper: 1) search for it in the Special Interest Groups (SIGs) below for which it would be relevant, 2) once the paper is located find the **Presenting Author** in the **Bookmarks** side panel and "click" on the Presentor's name to go directly to the paper.

DISPLAYS SIG Chair: Mr. Robert Clodfelter—Barco Simulation

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| Embedded Training Display Technology for the Army's Future Combat Vehicles | Eifert | US Army RDECOM |
| Display Design Concepts for Physics Based Simulation of Night Vision Goggles | Clark | Renaissance Sciences Corp. |
| Designing Simulator Display Systems | Leethy | Barco Simulation |
| Mylar vs Glass, One Project's Perspective | Fernie | CAE |

ENVIRONMENTAL MODELING SIG Chair: Mr. Ronald L. Magee—SAIC

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| Generating Enhanced Nat Env & Terrain for Interactive Combat Sim (GENETICS) | Wells | MOVES Institute, NPS |
| A Framework to Ensure Authoritative Representation of the Natural Env. for Sim. | Moody | Air&Space Nat.Env. |
| LIDAR-Turning High Fidelity Ground Terrain Data into Geo-Specific Objects | Hooper | Object Raku Technology |
| Enhanced Urban Synthetic Env. thru Logical Feature Population Techniques | Bitters | Univ. of West Florida |
| Synthetic Natural Environments from Hight Resolution Sensor Data | Ahlberg | Swedish Def.Res.Agency |
| Building High Resolution Models...Evolving Standards | Colleen | Planet 9 Studios |

GROUND VEHICLE SIMULATION SIG Chair: Dr. Yiannis Papelis—Nati'l Adv. Driving Sim-Univ. of Iowa

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| Wide Aspect Ratio PC Display Rearview Mirror Insets Low Cost Driving Sim. | Allen | Systems Technology |
| Enabling More Visual & Immersive Eng Env. for Highway Transportation Industry | Manore | Bentley Systems |
| An Appl Framework for Military Tng Devices Using Open Source Dev Tool Kits | David | Computer Sciences Corp. |
| Issues Related to the Commonality & Comparability of Driving Sim Scenarios | Ahmad | Univ. of Iowa |
| Applying Light Mapping Techniques to Vis-Sim Databases | Morrison | Realtime Tech |

IMAGE GENERATION TECNNOLOGIES SIG Chair: Mr. Brian Holmes—CATI Simulation

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| Bump Texture in Visual Simulation | Cheng | CGSD Corp. |
| OPTICAM—Rapid CAD Model Generation | Kincaid | OC-ALC/ENET |
| Benefits of Using 3D Voxel Graphics of Interactive Tng. | Pollock | NGrain |
| Status Update on the Common Image Generator Interface | Phelps | Boeing |

MARINE SIMULATION SIG Chair: Mr. Steve Fisch—MarineSafety

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| Coastline Terrain Fusion Process | Huber | Johns Hopkins Univ-APL |
| Modeling & Visualization of Motions of a Small Boat in Large Breaking Waves | Miller | Computer Sciences Corp. |
| Submersible Vehicle Operator Assistance System | Massey | Johns Hopkins Univ-APL |
| Approach Implementing Comprehensive Trainee Competence Eval & Assmt Sys... | Ponomarev | Transas Ltd. |

NETWORKED SIMULATION SIG Chair: Ms. Rita Simons—US Army PEOSTRI

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| Remote Virtual Environment Interface to Robotic Surgical System | Cardullo | State Univ of New York |
| Indoor Location & Tracking System Using Cognitive Packet Network Protocol | Rodriguez | US Army PEOSTRI |
| Simulation System Correlation and Common Run-Time Databases | Lagacé | CAE |
| Experiences with an Adaptable HLA Interface | Little | Nova Technologies |
| Networking Challenges STRI on the Future Combat Systems (FCS) Program | Matthews | US Army PEOSTRI |

PC SIMULATION SIG Chair: Mr. Mike Fortin—L3 Com

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| Image Generator Load Control | Latham | CGSD Corp. |
| Terabyte Texture Management | Nigus | FlightSafety Int'l |
| Real-Time GPU-Based Texture Synthesis | Woodard | Diamond Visionics |
| Military Uses of an Open Source Game Engine | Johnson | MOVES Institute, NPS |

SENSOR SIG Chair: Mr. Gordon King—Quantum3D

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| Sensor Texture Mapping for Three Dimensional Geo-Specific Terrain | Tidball | Camber Corp. |
| OPENIR: A Validated Infrared Rendering Library | Kanahale | SGI |
| The Importance of Precision in Real-Time Sensor Simulation | Potter | Quantum3D |
| A Tool for Accurate Representation of Sensor Simulations Using PC Technology | Myers | Camber Corp. |