Call For Papers

Journal of Defense Modeling and Simulation Special Issue: Cyber Defense – Methodologies and Techniques for Evaluation

Special Issue Editors

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Cyber has emerged as a strategic national domain of interest to both military and civilian sectors. The overlap between military and commercial networking resources and infrastructure complicates issues of protection, defense, and offense. The defense community is tasked not only with protecting our military information systems commercially procured, but also in protecting our nation's strategically vital enterprises. Homeland defense rests squarely on our ability to guard critical infrastructure control systems that have a wide range of exploitable vulnerabilities.

This special issue is devoted to publishing practical and theoretic approaches to measuring and evaluating cyber protection and defensive methodologies, with the specific focus on integration of simulation techniques for the purpose of verification, validation, or testing. Of particular interest are practical applications of modeling and simulation to hard problems of interest such as digital forensics, network defense, botnet-detection, malware analysis, denial of service, and situational awareness.

Topics of interest to the special issue include, *but are not limited to*, the following:

- Analysis frameworks and theoretical models of cyber defense
- Case studies of practical application of theoretical security foundations
- Models of cyber situational awareness and applicability to defensive operations
- Modeling of offensive, e.g., vulnerability discovery and exploitation, and counter offensive processes for cyber operations, to include education and training
- Methodologies for evaluating cyber defense tools and architectures' effectiveness and contributions in support of decision makers
- Domain models that map mission/organizational level goals to cyber defensive tasks

Submission and Review Process

Papers submitted to this special issue should be original and must not be under review elsewhere. Papers will be peer-reviewed in the same manner as other submissions to The

Journal of Simulation. Papers must be submitted electronically via the JDMS Manuscript Submission System: http://mc.manuscriptcentral.com/jdms. Please indicate in the cover letter that the paper is intended for this special issue. Further information can be found at the Society for Modeling and Simulation at http://www.scs.org.

Important Dates
Paper Submission: 15 Aug. 2010
Notification of Acceptance: 15 Oct. 2010
Submission of Final (revised) Paper : 15 Dec. 2010
Publication Expected: Spring/Summer 2011

For questions, contact the special issue editors shown above.