

Call For Papers
Journal of Parallel and Distributed Computing
Special Issue on Frontiers in Distributed Sensor Networks

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A Distributed Sensor Network (DSN) is a set of scattered intelligent sensors designed to obtain measurements from the environment, abstract relevant information, and derive appropriate inferences. Distributed sensor networks depend on multiple processors to simultaneously gather and process information from many sources. Interest in these systems stems from a realization of the limitations imposed by relying on a single source of information to make decisions. There has been increasing interest in the development of DSN's for information gathering, because new technologies make these networks economically feasible. The search for efficient, fault-tolerant architectures for DSN's has become an important research area in computer science. The goal of this special issue is to provide a forum for the publication of important research contributions in developing high-performance computing solutions to problems arising from the complexities of these systems.

Manuscripts submitted for this special issue should describe significant original research in the field of Distributed Sensor Networks and be relevant to aims and scope of the Journal of Parallel and Distributed Computing. Topics of interest include but are not limited to:

- Architectures, Algorithms and Complexity Issues
- DSN Tasking and Self-Organization
- Information Fusion Methodologies based on Statistical Decision Theory
- Distributed Detection/Classification Methods
- DSN Networking/Caching Issues
- Managing Resource Constraints
- Learning Patterns from Distributed Sensory Sources
- Coordination, Integration and Synchronization in DSN
- Challenging problems for future Distributed Sensing Applications

Submission Guidelines:

Interested authors should submit an electronic version of the manuscript either in postscript or PDF format as an email attachment to one of the guest editors. If you are unable to submit electronically, please submit a hardcopy. All submitted papers will be reviewed by the committee.

Schedule:

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| Deadline for manuscript submission | June 15, 2003 |
| Feedback for authors | December 15, 2003 |
| Revised paper due | February 1, 2004 |
| Notification of Final Decision | April 15, 2004 |
| Publication of Special Issue | June 2004 |