

## CALL FOR PAPERS

IAMCOM 2008 (<http://www.iamcom.org>)

### Intelligent Networks: Adaptation, Communications & Reconfiguration (IAMCOM)

held in conjunction with

3<sup>rd</sup> IEEE/ACM International Conference on COMmunication System softWAre and MiddlewaRE  
(IEEE COMSWARE 2008)

January 10, 2008, Bangalore, India.



Intelligent Networking has become popular in the context of distributed embedded systems for aerospace, automotive, military, E-commerce, and eco-surveillance applications. Unlike the telecom-centric networks of the 90's that had an inward focus on network signaling & control today's intelligent networks are designed from an application perspective. Here, networks could mean a set of collaborative data processing nodes that serve as application proxies (e.g., airborne nodes in a police surveillance network).

The goal of contemporary Intelligent Networking is to improve application-level reliability & performance, security, QoS assurance, and the like. The need for intelligent networking arises because the target application systems are too complex to be studied in isolation. A holistic approach to design that addresses both application and network can result in performance gains. Often, mathematical models and/or closed-form representations of target application systems do not exist or are too unwieldy to allow off-line analysis. For instance, network outages can have a profound impact on the application reliability in many military applications, but can be tolerated in certain commercial application domains. The mapping relationship between the network events and the application activities are deeply buried in the system operations, with no apparent mechanism for the system designers to track these cross-layer relationships.

The complex nature of modern day embedded systems applications provides a new dimension to the concept of intelligent networking --- and hence opens a set of new research directions. This new dimension covers three aspects: adaptation to resources & environment, reliable communications between nodes, and reconfigurations at various system levels. The purpose of this workshop is to provide a forum for the presentation of ongoing work in embedded systems control & management pertaining to the three pillars of adaptation, communication, and reconfiguration. Papers are solicited on the following topics:

- QoS assurance architectures
- Network state fusion, monitoring
- Utility-based QoS adaptation
- Vehicular network security
- Capacity provisioning
- Energy-aware wireless operations
- Dynamic resource allocations
- Distributed management & control
- Self-healing networks
- Location-sensitive data fusion
- Embedded systems applications --- aerospace, automotive, military & sensor networks
- Cross-layer approaches in system design
- 'Control-Theoretic' approaches to performance management
- GPS based location & tracking
- Latency-sensitive data streaming & fusion
- Service-level specification & verification
- Survivable links: restoration & routing
- QoS stability in wireless networks
- MAC-layer optimizations in wireless networks
- Incentive based QoS models for wireless networks
- Reliable communications in vehicular networks: Emergency Response

Accepted papers will be published in the workshop proceedings and through the IEEE Digital Library Xplore

#### Workshop Co-Chairs

**Kaliappa Ravindran, City University of New York, [ravi@cs.cuny.cuny.edu](mailto:ravi@cs.cuny.cuny.edu)**

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#### Important Dates

**Full Papers Submission Deadline**

**October 10, 2007**

**Notification of Acceptance**

**November 10, 2007**

**Camera-ready Manuscripts due**

**November 30, 2007**