

# Network Information Processing Program



## Vision

Creating technologies to effectively utilise massive information networks

### The Opportunity

Massive information networks storing a large variety of digital media, gathering sensor information, utilising multiple communication technologies, and delivering information to a wide variety of devices will be a dominant feature of future economies and lifestyles.

The Network Information Processing Program will deliver technologies for effectively discovering and delivering information from the network, anywhere, anytime, to a multitude of devices.

### Research

#### Information Discovery

- Media Comprehension for Key Concept Markup
- Data Mining of Networks of Information
- Mining Data Streams

#### Distributed Computing

- Peer-to-Peer and Grid Computing
- Simulation and Computing for Sensor Networks using Agent Technologies

#### Network Management

- Intrusion Detection
- Optimisation of Routing, Scheduling, Network Configuration, etc
- Fault Detection and Recovery

#### Foundational Research

- Constraint Programming
- Textual and Spatio-Temporal Indexing
- Natural Language Understanding
- Data Mining
- Agents