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Panel

Next-Generation Web Technology and Database Issues



« Next Generation »

- 20th Century: Data Processing
- 21st Century: Data Exchange
- The Issue now is Mutual Understanding
 - >> Semantics
 - >> Ontologies or XML ?

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Ontologies

- Ontology Modeling
- Ontological Reasoning
- AI: Reasoning determined Modeling
- DB: Modeling first, Reasoning second
 - >> Conceptual Modeling of Ontologies
 - >> Contextual Ontologies

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Ontologies Building

- Traditional Approaches:
 - ◆ Top Down Design
 - ◆ Bottom-Up Integration / Federation
 - ◆ Humans define how the world should be
 - ◆ A priori
- Newest Approach:
 - ◆ Emergent Semantics
 - ◆ (Peer-to-Peer Architecture)
 - ◆ Intelligent agents tell us how the world is
 - ◆ A posteriori

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More Informative Data

- Spatio-temporal Information (pervasive)
- Metadata
- Quality Matters (uncertainty)

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Location-Based Services

- Information Users are distributed and mobile
- Now: Information anywhere, anytime, for anybody
- Tomorrow: Information somewhere, sometime, for somebody
(at the right moment and place for the right user)

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Thanks
for your attention



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