

FAKULTÄT FÜR INFORMATIK

Faculty of Informatics

Database and Artificial Intelligence Group (DBAI)

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FACULTY OF **INFORMATICS**



Overview of Research Activities

- Information Integration
- Web Information Extraction
- Argumentation
- Planning and Scheduling
- Reasoning
- Parameterized Complexity



Information Integration

Project: Service Oriented Data Integration

- Extend Web Services
- Foundations of Data Networks
- Optimization Tasks
- Select and mix Data Services





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Web Information Extraction

Project: Task Mining from Crowd Behaviour

- Task Mining
- Task Model
- Functional Fingerprint
- Learning from Crowd
 Behaviour







mobile users



blind users



robots



Argumentation

Project: New Methods for Analyzing, Comparing, and Solving Argumentation Problems

- Formal Models of Arguments, Relationships, Conflict Resolutior
- Different Semantics
- Complexity Analysis
- Uniform and Efficient System





Planning and Scheduling

Project: Test Support for End User Programming

- Personnel Planning
- Test Case Generation for End User Programming
- Test Automation
- Meta-Heuristics and

Constraint Programming





Reasoning, Parameterized Complexity

Project: Turning Theoretical Tractability into Efficient Computation

- Hard Reasoning Problems
- Fixed-Parameter Tractability (FPT)
- Efficient Computation
- Datalog, Dynamic Programming





Research and Teaching

Information Integration	Database Theory Foundations of Information Integration
Web Information Extraction	Web Data Extraction
Argumentation	Abstract Argumentation
Planning and Scheduling	Problem Solving and Search in Al Machine Learning
Reasoning	Deductive Databases
Parameterized Complexity	Complexity Theory