

# Table of Contents

## Poster Papers

- Non-Clausal Resolution Theorem Proving for Fuzzy Description Logic ..... 1  
*Hashim Habiballa*
- Formal Reasoning under Uncertainty to Improve Service Provision in  
Mobile Ad-Hoc Networks ..... 13  
*Martín López-Nores, José J. Pazos-Arias, Jorge García-Duque,  
Ana Fernández-Vilas, Rebeca P. Díaz-Redondo*
- Composing Semantic Web Services from Different Ontologies ..... 23  
*Ismael Navas-Delgado, Maria del Mar Rojano-Muñoz, José F. Aldana-Montes*
- On the Expressive Power of Live Sequence Charts ..... 33  
*Tobe Toben, Bernd Westphal*
- Interference and Topology Control in Wireless Networks with Scale-Free  
Distribution of Nodes ..... 44  
*Zbigniew Walczak*

## Student Papers

- Wrapping Relational Data Structures to Object-Oriented Databases in the  
Data Grid Architecture ..... 54  
*Radosław Adamus, Kamil Kuliberda, Jacek Wislicki, Kazimierz Subieta*
- Efficient Quantum Query Algorithms Detecting Hamming and  
Reed-Solomon Codes ..... 64  
*Rubens Agadžanjans, Juris Smotrovs*
- Use of FCA in the Ontology Extraction Step for the Improvement of the  
Semantic Information Retrieval ..... 74  
*Peter Butka*
- Relay Node Placement in Energy-Constrained Networks Using SOMA  
Evolutionary Algorithm ..... 83  
*Miroslav Červenka, Ivan Zelinka*
- Computing Boolean Functions: Exact Quantum Query Algorithms and  
Low Degree Polynomials ..... 91  
*Alina Dubrovskaja, Taisija Mischenko-Slatenkova*
- On Improving Variability by Separation of Concerns in Logical Changes .. 101  
*Zoltan Fazekas*
- Improving Job Search by Network of Professions and Companies ..... 111  
*György Frivolt, Mária Bieliková*

XII Table of Contents

|  |            |
|--|------------|
| VirGIS Data in Semantic Web Environment .....                                    | 120        |
| <i>Zdeňka Linková, Radim Nedbal</i>  |            |
| Limitations of Unary Finite Automata .....                                       | 128        |
| <i>Laura Mančinská, Maris Ozols, Renate Praude, Agnese Zalcmāne</i>              |            |
| Retraining of the SAMANN Network .....   | 137        |
| <i>Viktor Medvedev, Gintautas Dzemyda</i>  |            |
| Motivations of Extensive Incorporation of Uncertainty in OLE Ontologies .        | 145        |
| <i>Vít Nováček</i>   |            |
| Transforming Current Web Sources for Semantic Web Usage .....                    | 155        |
| <i>Martin Řimnáč</i>   |            |
| RollingBall: Energy and QoS Aware Protocol for Wireless Sensor<br>Networks ..... | 166        |
| <i>Roman Špánek</i>  |            |
| <b>Author Index</b> .....  | <b>174</b> |