PREFACE

This monograph presents the current problems of research and applications of Information and Communication Technologies, with the special focus on the new approaches developed in the area of widely understood Artificial Intelligence (AI). AI is one of the newest fields in science and engineering and is relevant to any intellectual task. It is universal and at the same time big field that encompasses a huge variety of subfields, ranging from automatic control in engineering systems driven by intelligent algorithms to the AI techniques and methods applications to supporting decision making in contemporary organizations. What can AI do today? A short and concise answer is very difficult because of many activities in many subfields. Therefore we hope that this collection of papers will provide all interested researchers and systems developers with a fresh view of how the modern AI applications to Business and Engineering problems look like. To this end, the following chapters include the papers describing models, algorithms and methods of AI used in Information and Communication Technologies applications.

Main topics which are covered in the issue are:

-   Automatic Control Systems
-   Natural Language Processing and Web Mining
-   Intelligent Agents and Multi-Agent Systems
-   Artificial Intelligence in Modeling and Simulation
-   Business Intelligence Systems
-   Neural Networks, Machine Learning
-   Bioinformatics using Intelligent and Machine Learning
-   Decision Making Support and Expert Systems

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Rzeszow – Sofia   *G. Setlak, M.Alexandrov, K. Markov*
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