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# Diagnostic Test Approaches to Machine Learning and Commonsense Reasoning Systems

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Diagnostic Test Approaches to Machine Learning and Commonsense Reasoning Systems



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### Xenia Naidenova (Military Medical Academy, Russia)

The consideration of symbolic machine learning algorithms as an entire class will make it possible, in the future, to generate algorithms, with the aid of some parameters, depending on the initial users' requirements and the quality of solving targeted problems in domain applications.

**Diagnostic Test Approaches to Machine Learning and Commonsense Reasoning Systems** surveys, analyzes, and compares the most effective algorithms for mining all kinds of logical rules. Global academics and professionals in related fields have come together to create this unique knowledge-sharing resources which will serve as a forum for future collaborations.

### **Topics Covered:**

- Algorithms
- Apriori-like bottom-up search
- Closure operations of Galois connections
- Data mining
- Diagnostic test approach

- Formal concept analysis
- Knowledge discovery
- Machine learning
- Ontologies
- Web mining

**Market:** This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal forclassroom use.

Xenia Naidenova is a senior researcher of the Group of Psycho Diagnostic Systems' Automation at the Military Medical Academy (St. Petersburg, Russia). She is currently the head of Project DIALOG: Methods of Data Mining in Psychological and Physiological Diagnostics. Dr. Naidenova received a diploma of engineering with a specialty in computer engineering (1963) and a PhD in technical sciences (1979), both from the Lenin Electro-Technical Institute of Leningrad. In 1999 she received a senior researcher diploma from the Military Medical Academy (St. Petersburg, Russia). She has guided the development of several program systems on knowledge acquisition and machine learning including DEFINE, SIZIF, CLAST, LAD, and diagnostic test machines and has published over 150 papers. Dr. Naidenova is a member of the Russian Association for Artificial Intelligence and is on the Program Committee for the KDS.



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