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| Title | Answering Why-Questions Using Probabilistic Logic Programming | | |
| Author(s) Name | Abdus Salam, Rolf Schwitter, Mehmet A. Orgun | | |
| Contact Email(s) | abdus.salam@aiub.edu | | |
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| Abstract |  |
| We present a novel architecture of a closed domain question answering system that learns to answer why-questions from a small number of example interpretations. We use a probabilistic logic programming framework that can learn probabilities for rules from positive and negative example interpretations. These rules are then used by a meta-interpreter to generate an explanation in the form of a proof for a why-question. The explanation is displayed as an answer to the question together with a probability. In certain contexts, follow-up questions can be asked that conditionally depend on these why-questions and have an effect on the probability of the subsequent answer. The presented approach is a contribution to explainable artificial intelligence that aims to take machine learning out of the black-box. | |