Reinforcement Learning and Utility-Based Decisions

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ABSTRACT

In one model of utility-based data mining (UBDM), the primary concerns are the cost of acquiring data, the computational costs of mining the data, and the benefit of using the mined knowledge. Finding a truly optimal strategy over all these sources of utility is intractable. I will describe some recent trends in the reinforcement learning literature that deal with a set of analogous problems from a PAC perspective and I will attempt to connect these ideas back to the UBDM setting.