

# The Method of Learning Personal Preference with Reinforcement Learning

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**Abstract**— We propose a method of learning personal preference using Reinforcement Learning (RL). Existing research on personal preference is a method using machine learning, and the learning results are simply related to input data. In order to better learn personal preference, evaluation of learning result is also important. Therefore, we use RL to calculate reward for learners' choice. For this, we design a model that calculates and evaluates reward. The results show learned policy and reward using proposed method in environment.

**Keyword**— Reinforcement Learning, Learning Preference, Recommendation System, Personal Preference, Q-learning



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