

عنوان مقاله:

A Predictive Reinforcement Learning Framework for Modeling Human Decision Making Behavior

محل انتشار:

چهاردهمین کنفرانس بین المللی سالانه انجمن کامپیوتر ایران (سال: 1388)

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نویسندگان:

Rezvan Kianifar - *Department of Biomedical Engineering Amirkabir University of Technology Tehran, Iran*

Farzad Towhidkhah - *Department of Biomedical Engineering Amirkabir University of Technology Tehran, Iran*

خلاصه مقاله:

Human can determine optimal behaviors which depend on the ability to make planned and adaptive decisions. In this paper, we have proposed a predictive structure based on neuropsychological evidences to model human decision making process by concentrating on the role of frontal brain regions which are responsible for predictive control of human behavior. We have considered a model-based reinforcement learning framework to implement the relations between these brain areas. Finally, we have designed an experimental test to compare the function of model with human behavior in a maze task. Our results reveal that there is more than reward and punishment in human behavior, and considering higher cognitive functions such as prediction will help to have more reliable models which could better describe human behavior.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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