SPECIAL RESEARCH SEMINAR

Presented by the Center for Human Neuroscience Research at the Fralin Biomedical Research Institute at VTC

FRALIN BIOMEDICAL RESEARCH INSTITUTE AT VTC
CENTER FOR HUMAN NEUROSCIENCE RESEARCH
VIRGINIA TECH

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In Person Seminar: Peril, Prudence and Planning as Risk, Avoidance and Worry

Since the days of the Bernoullis, formal approaches to risk have occupied center stage in both the theory and practice of normal decision-making. There are marked individual differences in risk attitudes, and extremes are associated with psychiatric dysfunctions, notably in anxiety disorders. However, modern approaches to understanding and mitigating risk, in either one-shot or sequential settings, have yet to permeate fully the fields of neural reinforcement learning and computational psychiatry. Here Dr. Dayan and his team use one prominent approach, called conditional value-at-risk (CVaR), to examine optimal risk-sensitive choice and one form of optimal, risk-sensitive offline planning. The team relates the former to both a justified form of the gambler's fallacy and extremely risk-avoidant behavior resembling that observed in anxiety disorders; and the latter to worry and rumination. We also provide experimental illumination over aspects of these results. This research is joint work with Kevin Chen, Chris Gagne, Kevin Lloyd and Xin Sui.

WEDNESDAY, NOV. 8, 2023 at 10:45 a.m.

Room G101 A/B, 4 Riverside Circle.
Or watch via Zoom at https://virginiatech.zoom.us/j/87961452115

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