Rapid learning of complex sequences with time constraints: A dynamic neural field model

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Many of our sequential activities require that behaviors must be both precisely timed and put in the proper order. In this talk, I will present a neuro-computational model based on the theoretical framework of Dynamic Neural Fields that supports the rapid learning and flexible adaptation of coupled order-timing representations of sequential events. The simulation results are discussed with respect to the goal to endow autonomous robots with the capacity to efficiently learn complex sequences with time constraints by observation, supporting more natural human-robot interactions.

References

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