Fast Weights Using Improved Memory Consolidation Designs

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Presentation Abstract Summary   Storing better quality and greater amount of memory has been a difficult challenge for deep learning. While the current artificial neural networks excel at tasks such as regression and classification, they fail to perform equally well on representing variables and storing data over long time. In this paper, we introduce an enhanced fast weights model that includes robust memory consolidation designs into the existing memory transformation mechanisms. We show that our model comes with no additional costs, converges faster, and out-performs the original fast weights model on the associative retrieval tasks.

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Keywords

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