

Attention based models in End-to-End ASR

Exploration of Attention in ESPNET toolkit

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International Institute of Information Technology - Bangalore

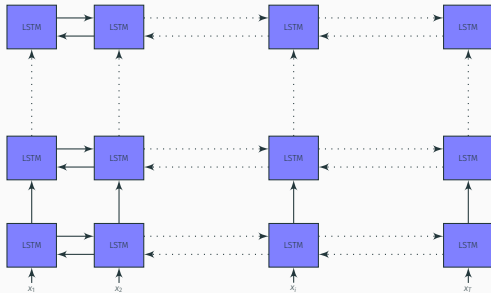
1. Introduction

Introduction

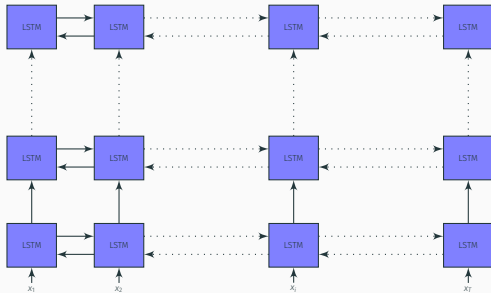
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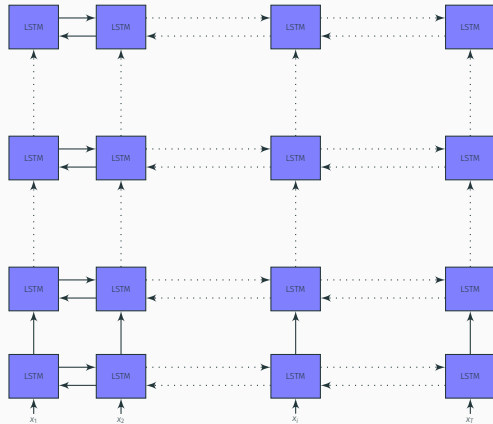
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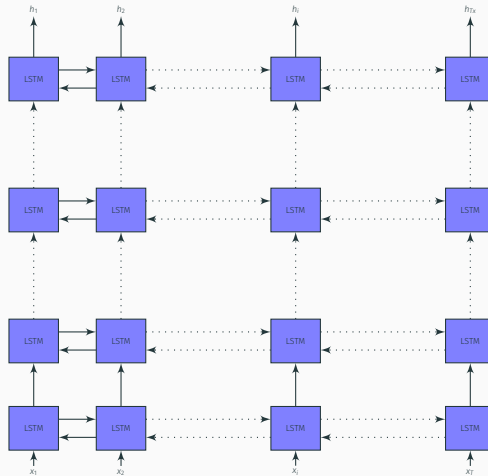
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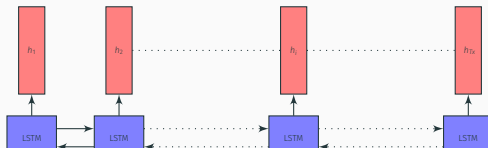
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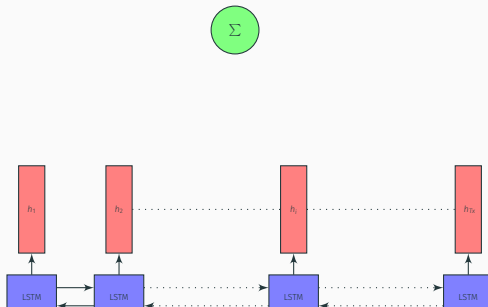
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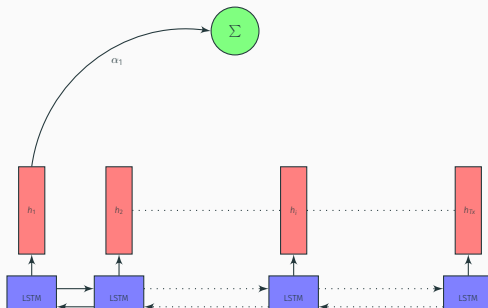
Introduction to Attention



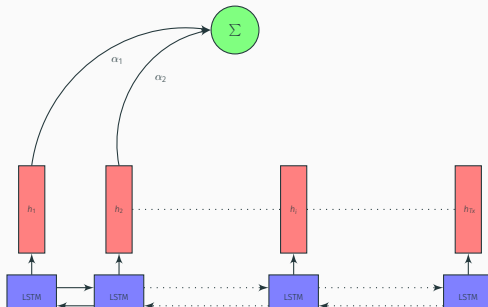
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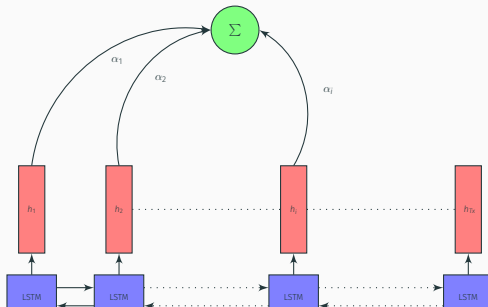
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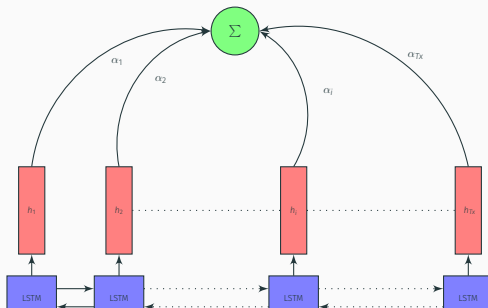
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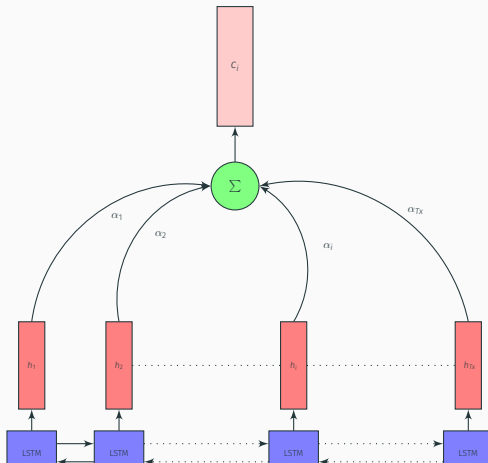
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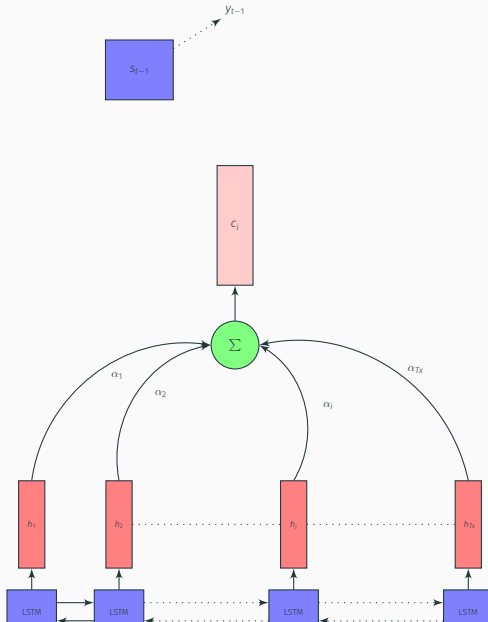
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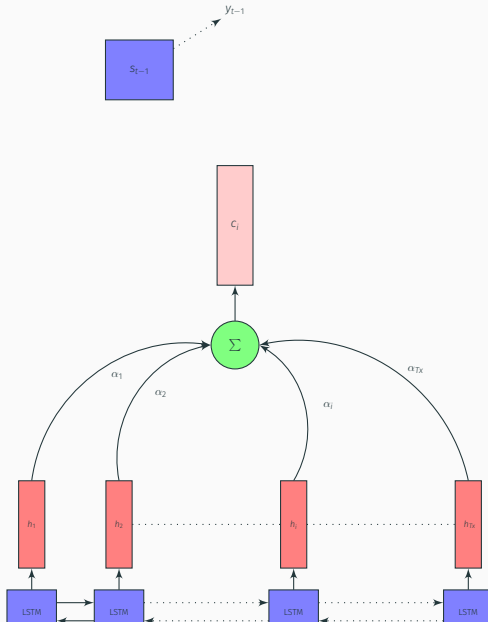
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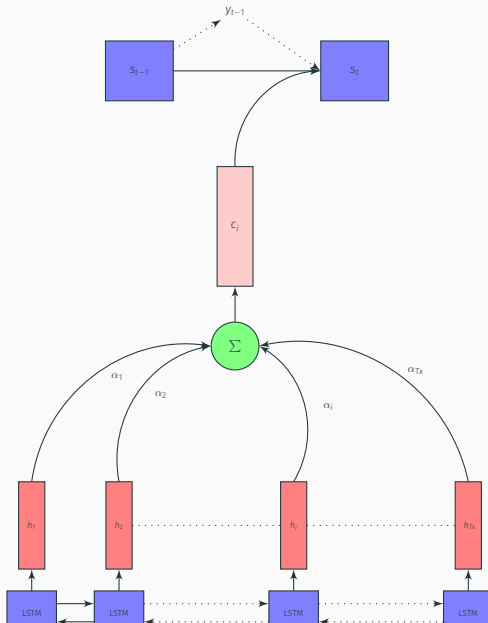
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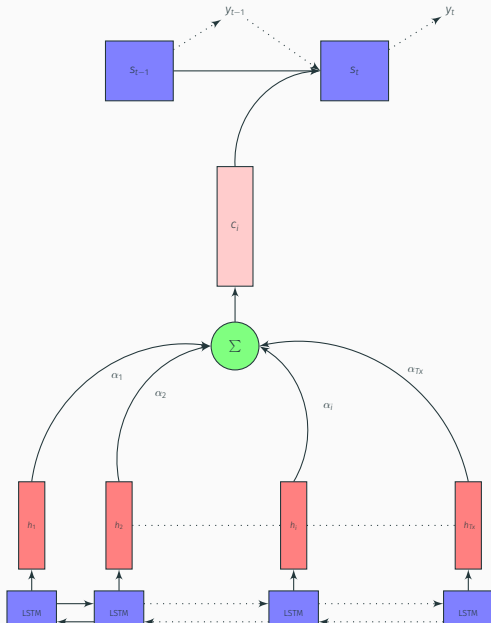
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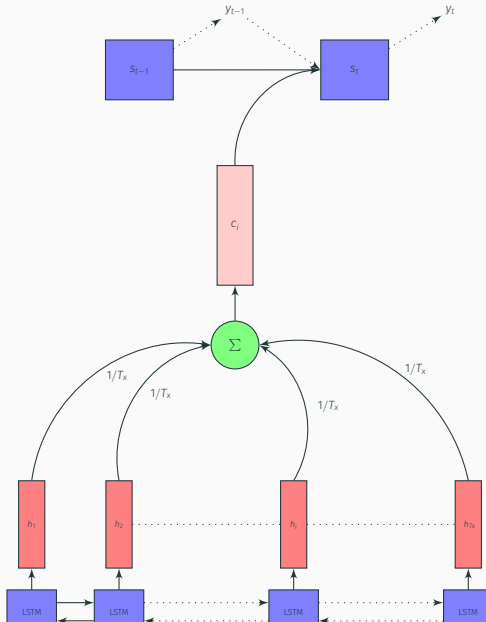
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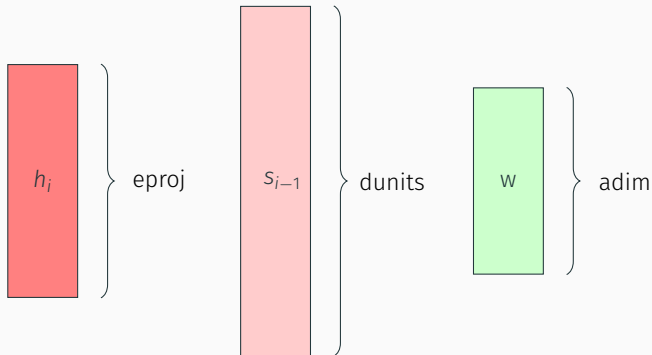
Introduction to Attention



No Attention [Equal Attention?]

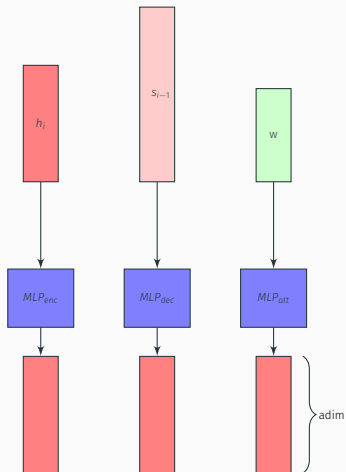


Dimensions of representations



Mostly $eproj \neq dunits \neq adim$

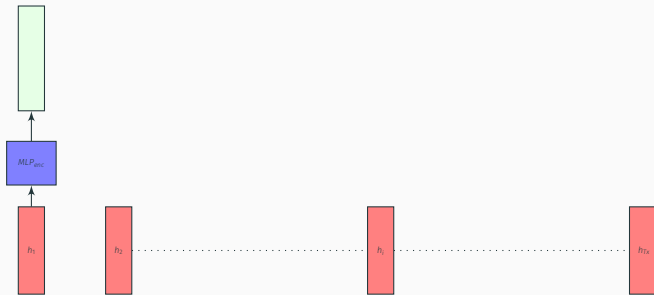
Matching the dimensions of representations



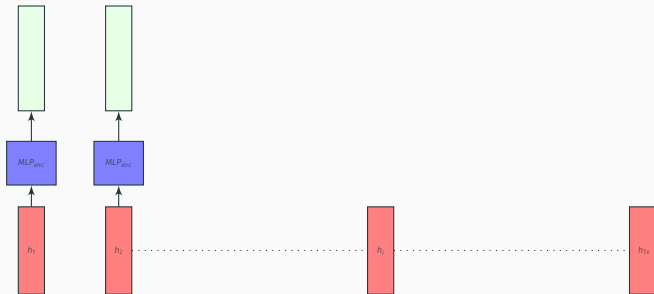
Dot product Attention



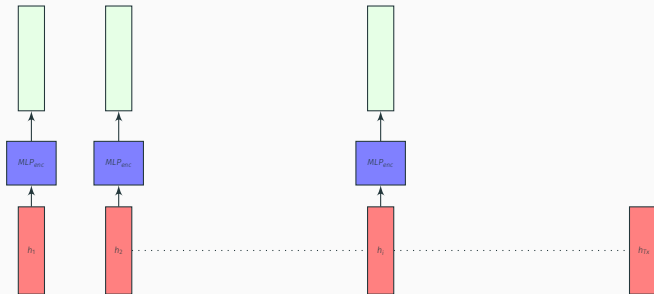
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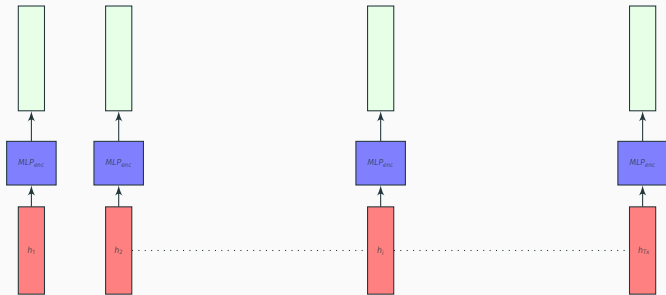
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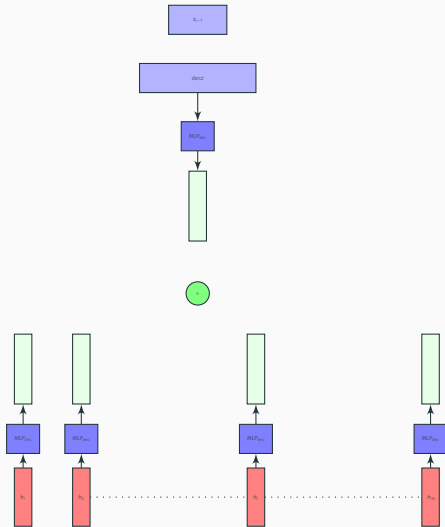
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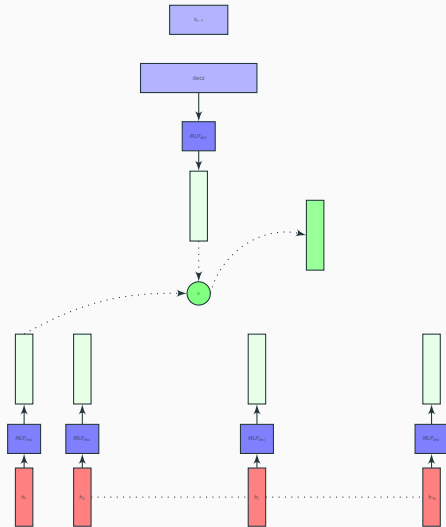
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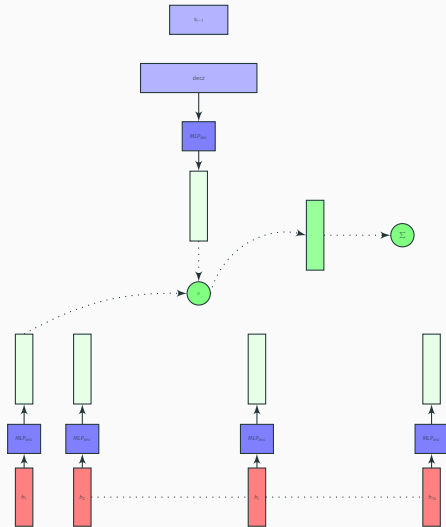
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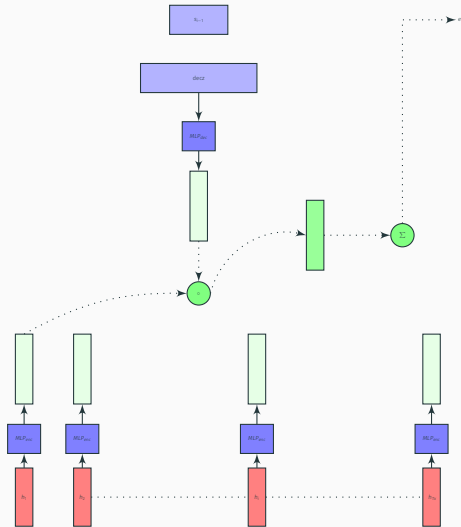
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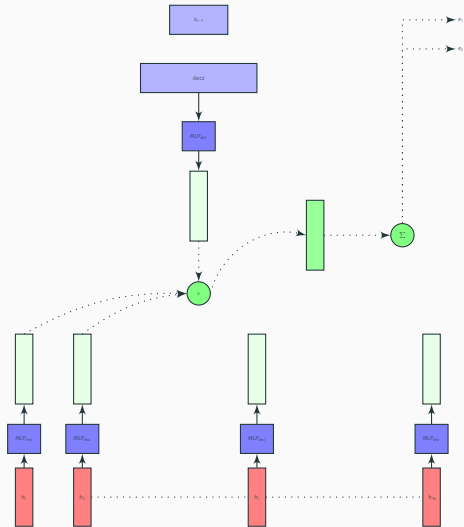
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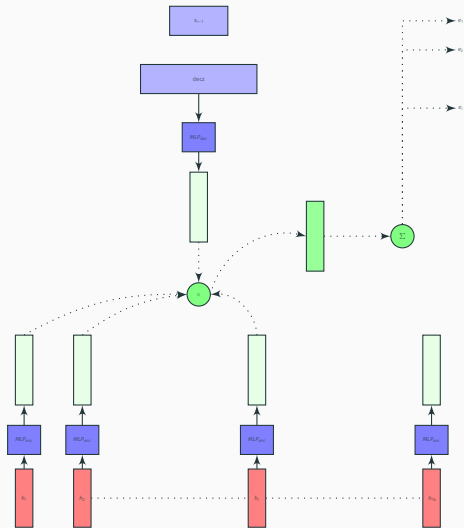
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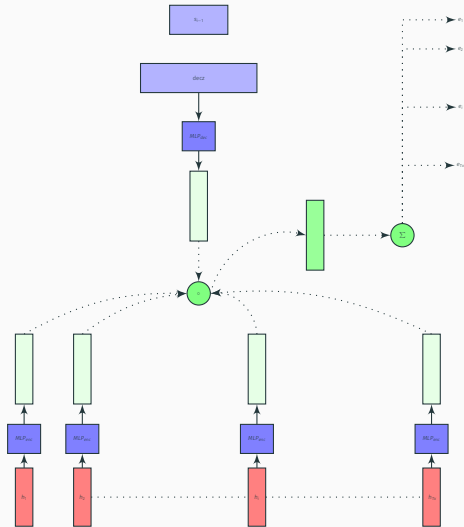
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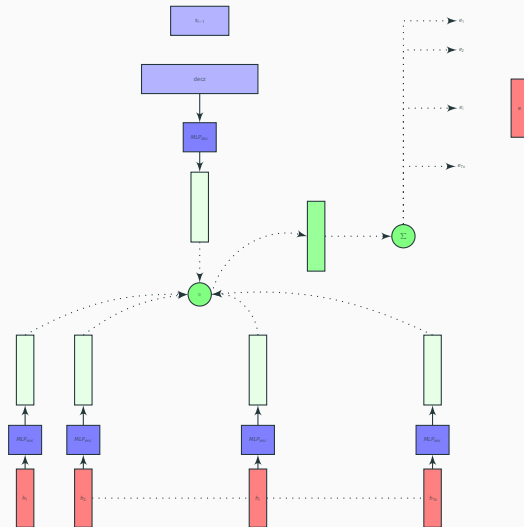
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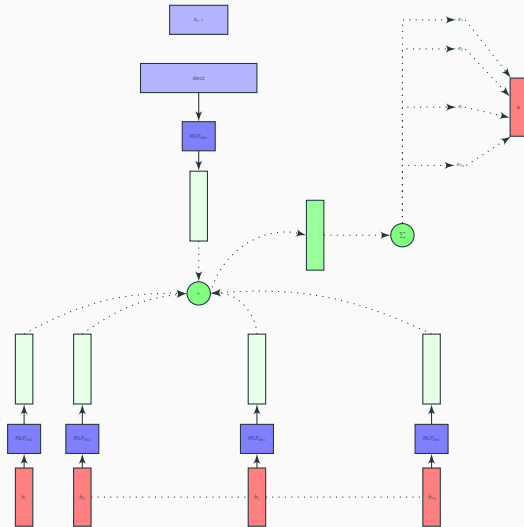
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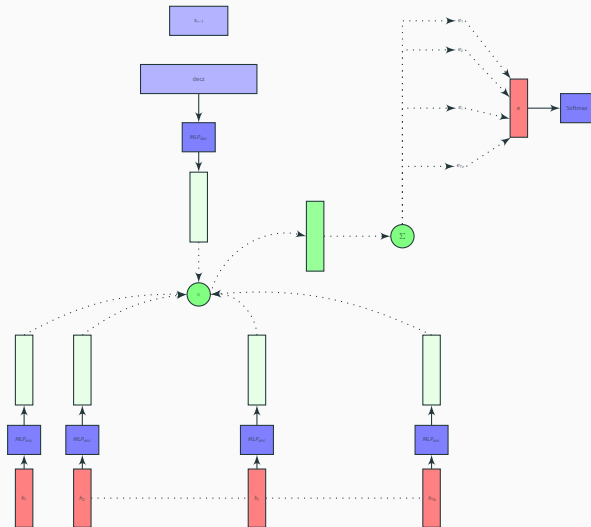
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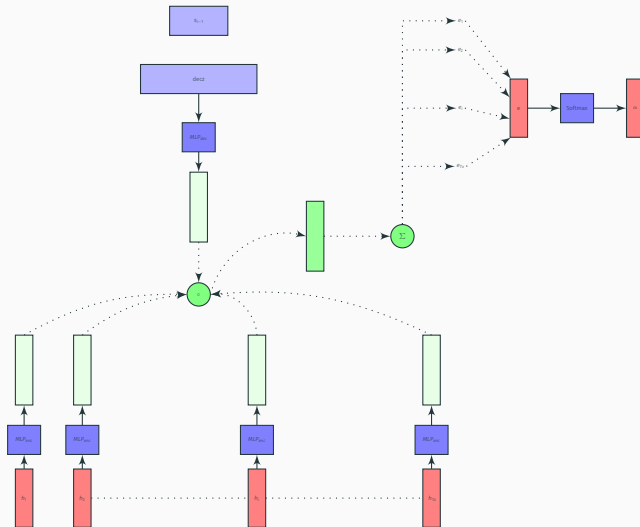
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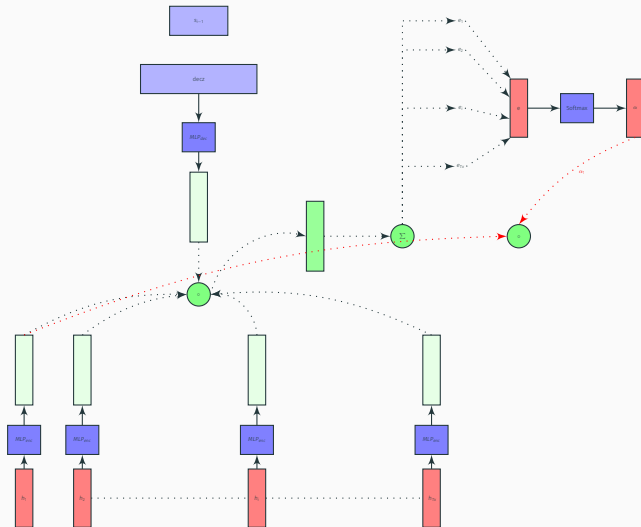
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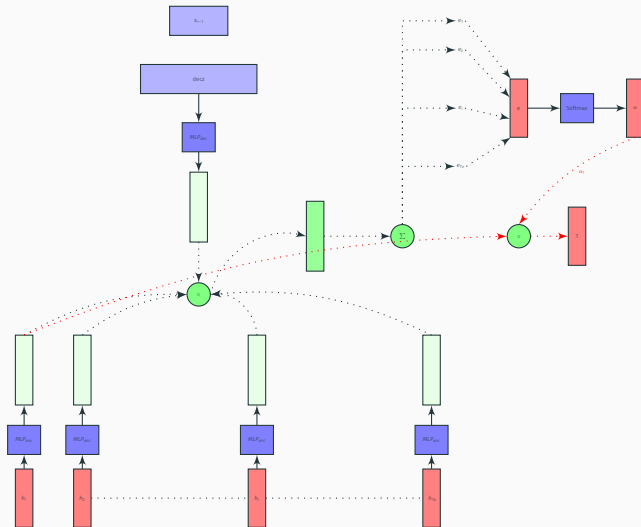
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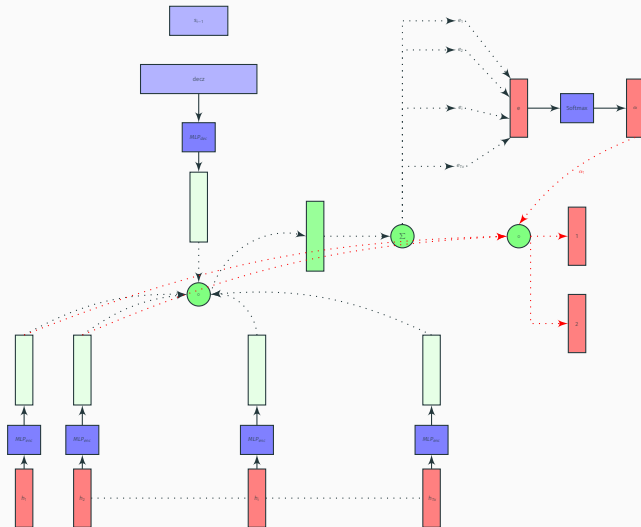
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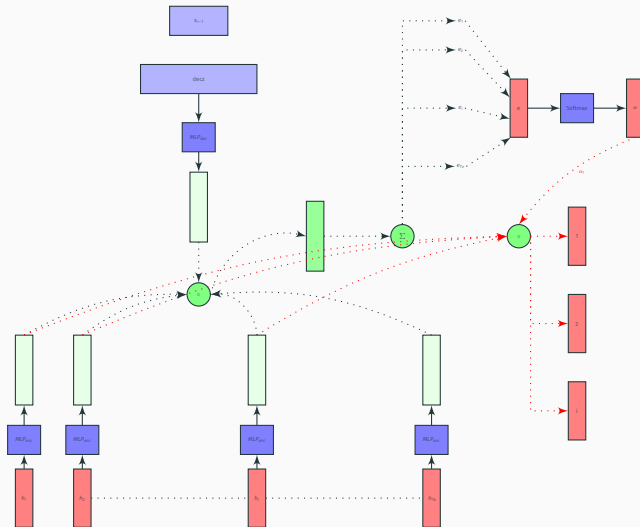
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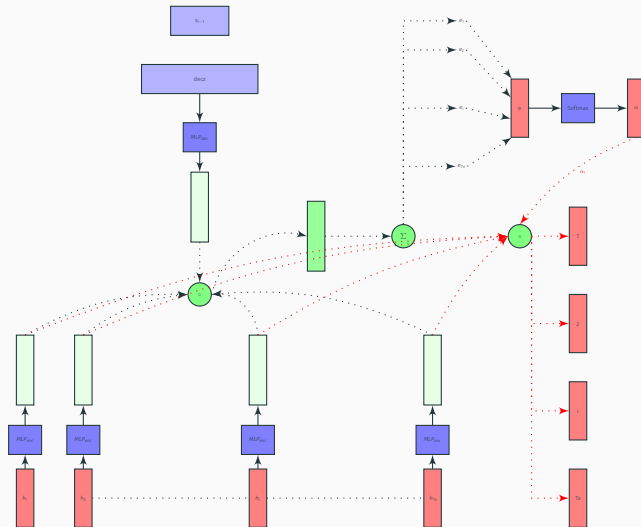
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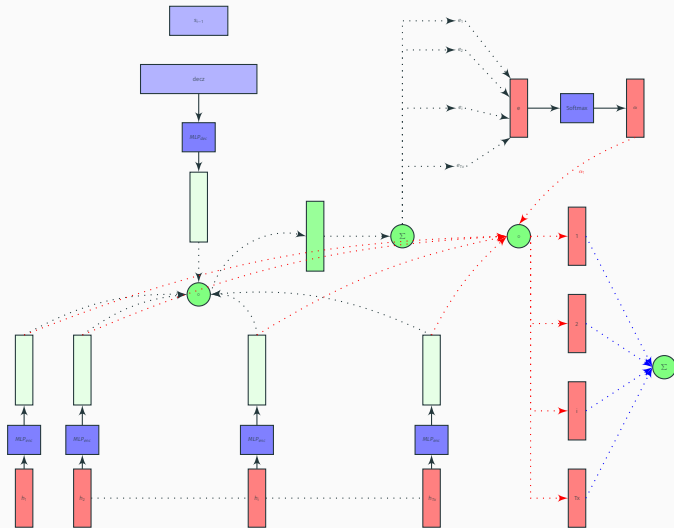
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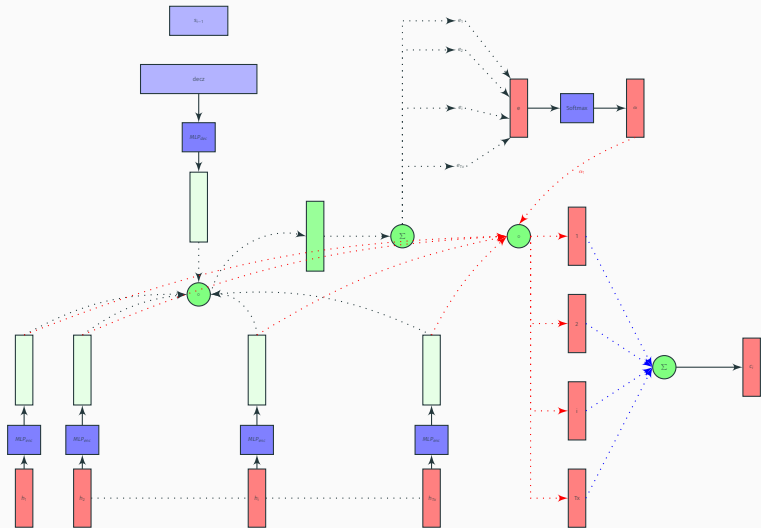
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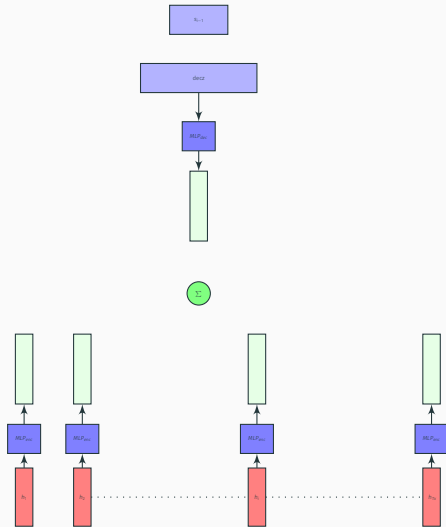
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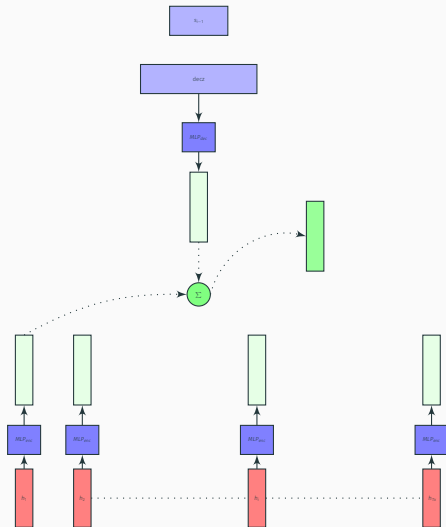
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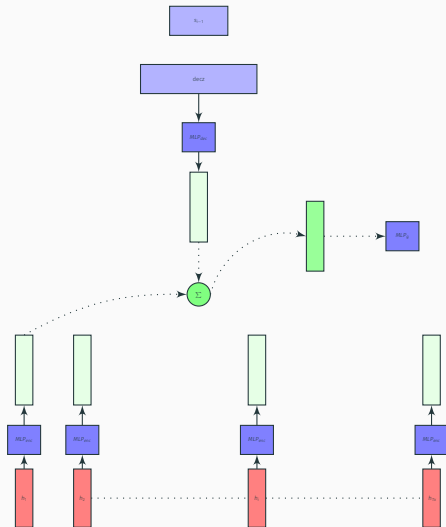
Additive Attention



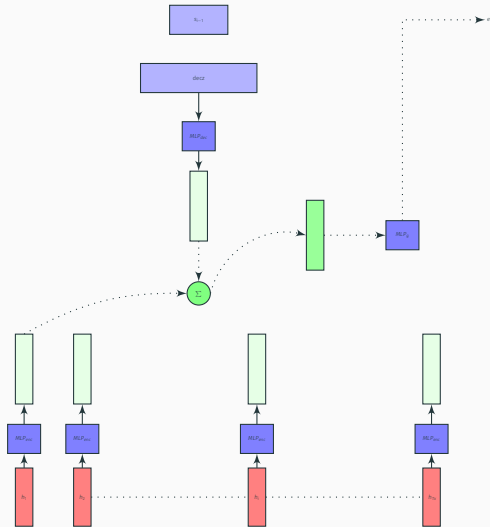
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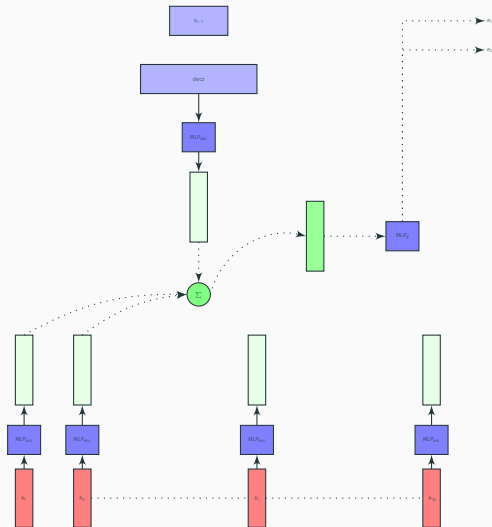
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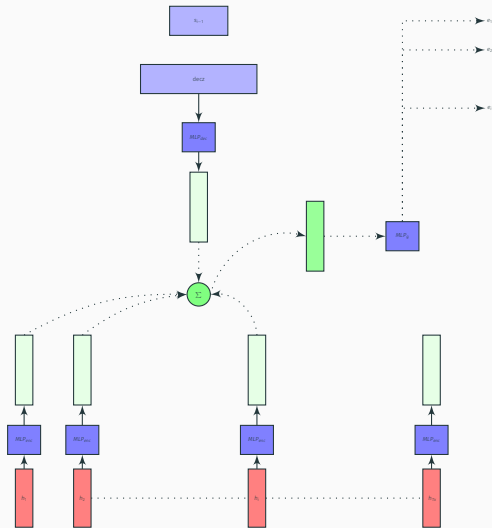
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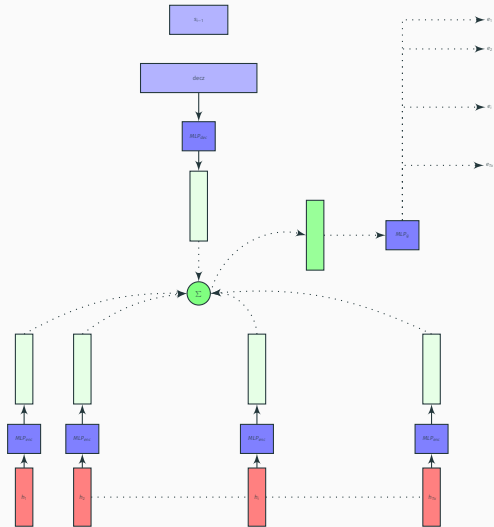
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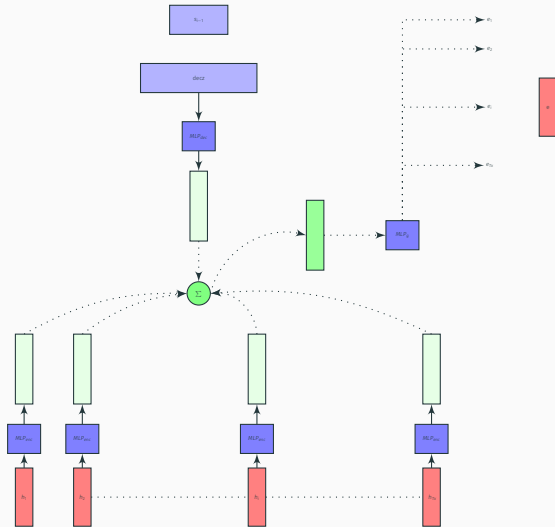
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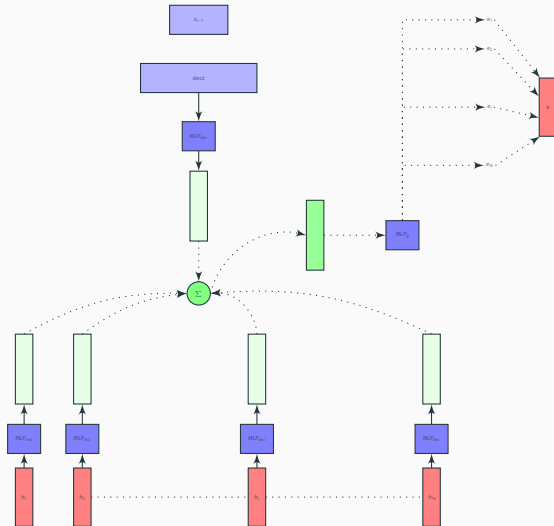
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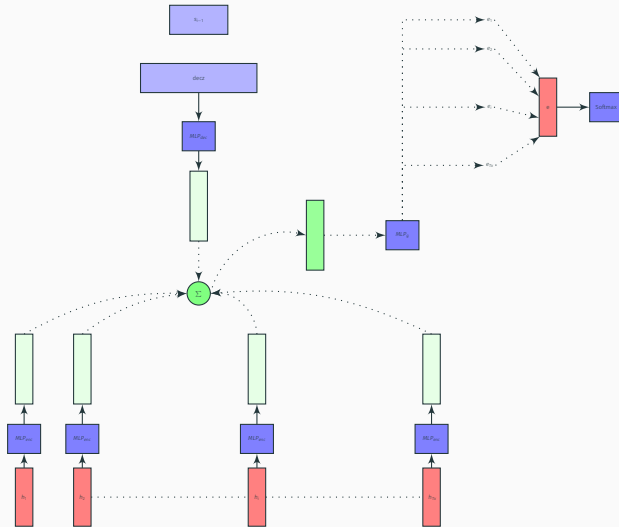
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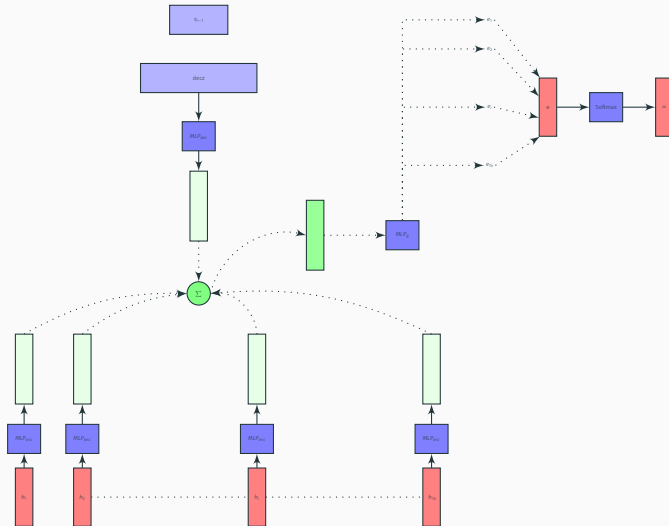
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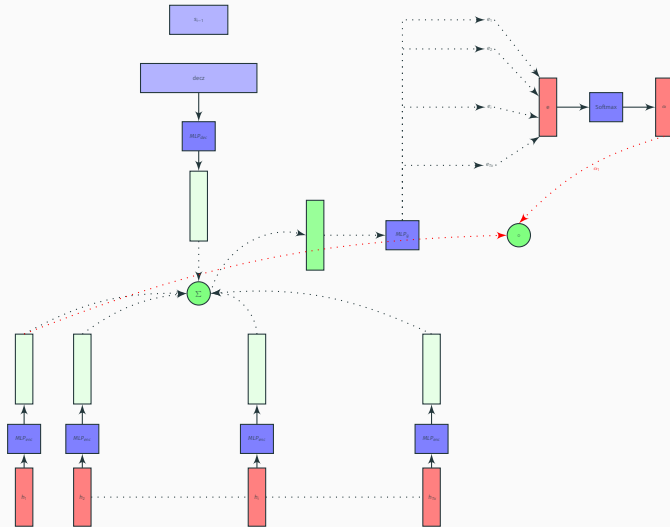
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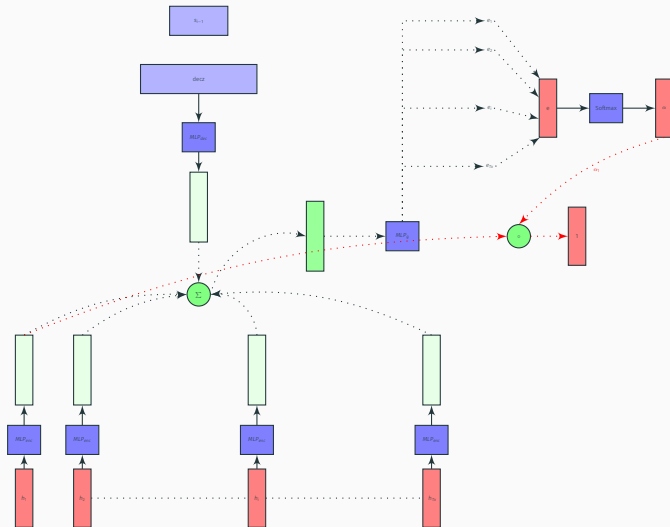
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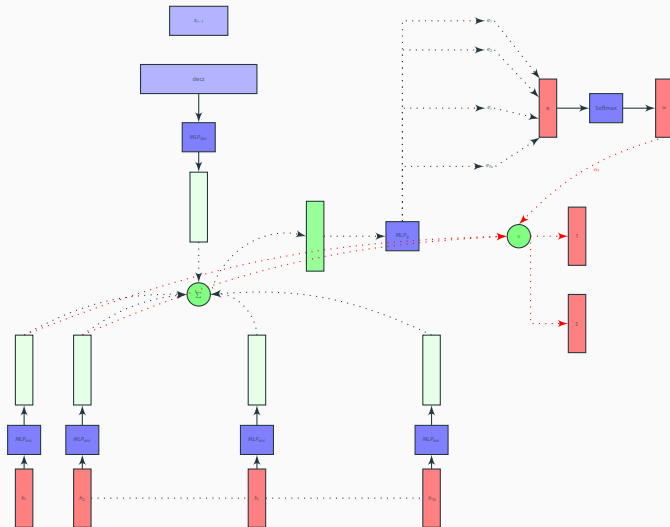
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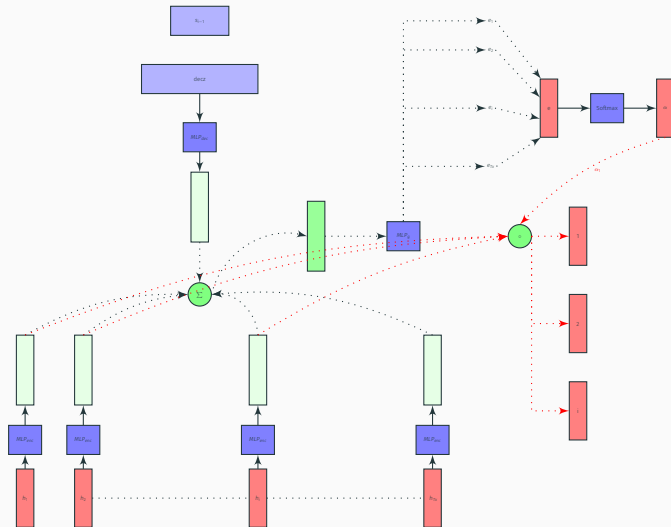
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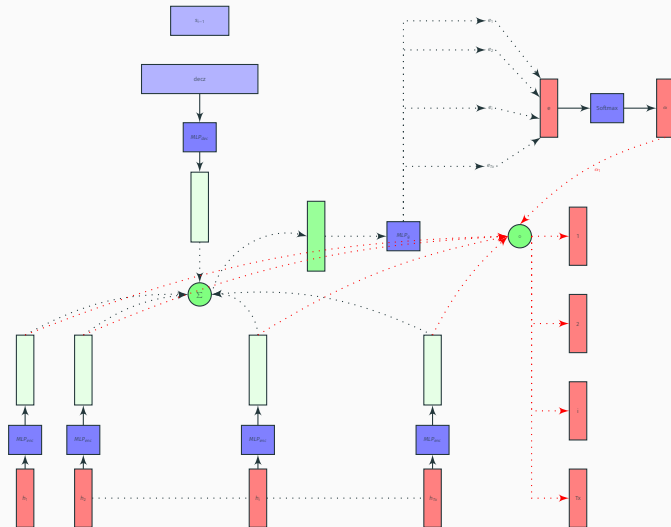
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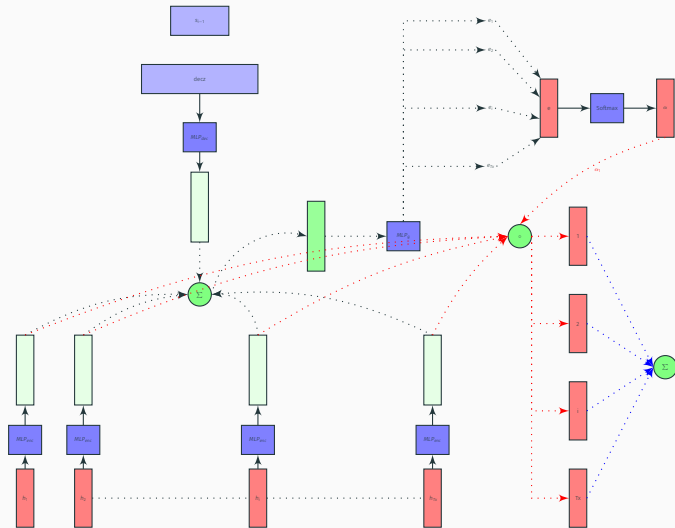
Additive Attention



Additive Attention



Additive Attention



Additive Attention

