

**Variable Order Sequence Memory through  
Hierarchical Temporal Memory**  
HONORS RESEARCH PAPER

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# 1 Time Series

Motivate the problem, time series are everywhere

Talk about ARIMA models

# 2 Hierarchical Temporal Memory

## 2.1 The Neocortex

Overview of the neocortex

Pyramidal Neurons

## 2.2 Hierarchical Temporal Memory

Sequence memory - SDRs and transitions

Variable order sequence memory - cells per minicolumn

# 3 Literature Review

Does anyone know if its able to do this?

It has been used in applications, look there

# 4 Experiment Design

# 5 Results

# 6 Further Work





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