

Chapter Revision History

The table notes major changes between revisions. Minor changes such as small clarifications or formatting changes are not noted.

Version	Date	Changes	Principal Author(s)
0.4		Initial release	C. Baranski
0.5	March 2017	Take out references to learning algorithms (separate web pages published)	C. Baranski

Content to be Incorporated

Other chapters will be added to this book in subsequent releases. Following is a tentative list of these additional chapters, including topics that will likely be discussed in these chapters. We've also included links to current papers or other documentation that offer information on the specific topics, so you can get started now.

HTM Neuron

This chapter will cover such topics as synapses, active dendrites, immunity to noise, etc. For some information on the HTM Neuron before this chapter is complete, you can read the paper "Why Neurons Have Thousands of Synapses, a Theory of Sequence Memory in Neocortex" by J. Hawkins & S. Ahmad (2016). Published in *Frontiers in Neural Circuits*, March 2016, Volume 10, <http://dx.doi.org/10.3389/fncir.2016.00023>

HTM Cellular Layer

This chapter will cover topics such as mini-columns, sequence memory and temporal pooling. For some information on HTM sequence memory before this chapter is complete, you can read the paper "Continuous Online Sequence Learning with an Unsupervised Neural Network Model" by Y. Cui, S. Ahmad, J. Hawkins & C. Surpur. You can find this paper here <http://arxiv.org/abs/1512.05463>.

HTM Region

HTM Hierarchy

Sensorimotor Integration

Behavior Generation

HTM Applications

This chapter will discuss real world applications of HTM systems.