

Figure 10.18: A schematic of an example of a network with an explicit memory, capturing some of the key design elements of the neural Turing machine. In this diagram we distinguish the "representation" part of the model (the "task network," here a recurrent net in the bottom) from the "memory" part of the model (the set of cells), which can store facts. The task network learns to "control" the memory, deciding where to read from and where to write to within the memory (through the reading and writing mechanisms, indicated by bold arrows pointing at the reading and writing addresses).