

Figure 1: Turing machines are named after Alan Turing

1 Turing Machines: The Simplest Computers

Turing machines are the simplest and most widely used theoretical models of computing. Far too slow and unwieldy ever to be embodied in a real device, these conceptual machines nevertheless seem to capture everything we mean by the term *computation*. Not only do Turing machines occupy the top level of the Chomsky hierarchy, but they also seem capable of computing any function which is computable by any other conceptual scheme.

2 Alan Turing

The Turing machines described in section 1 are named after Alan Turing.