Response 3 Science Theory and Research Methodology DD2205

Jim Holmström 890503-7571 jimho@kth.se

November 11, 2012

The chapter on Turing describes the process in which the concepts of algorithms and computations was formalized by the Turing machine. Also a quite extensive description on how the Turing machine itself operates was included.

The entire thing started out as a formalization of "process" in the hunt to show that entscheidungsproblem is unsolvable, but it turned out that this resulted in a formalization of both algorithms and computation. A formalization later to be used to concretize the general purpose computer as in those we see today.

The Turing machine really breaks down the algorithm and computation to it's most basic building blocks and are still used in modern theoretical computer science.