Final Assignment Science Theory and Research Methodology DD2205

Jim Holmström 890503-7571 jimho@kth.se

November 11, 2012

- 1 Summary
- 2 Do I agree with the conclusions?
- 3 Am I excited?

Artificial Scientist: * Use algorithms with active learning on real life experiments for example the microfluid one. * Use an artificial scientist to improve the artificial scientist, OMFG

* Hardware is a bit behind, need neurla processors or processors which do errors but the algorithms are errorcorrecting initself, which is closer to neural-processing in the neuronnets. * also need other ways of thinking dealing with massive-parallel, refer to bigdata-eventguy which had had the new parallel-databse idea. Most machinelearning algorithms is non-sequencial(is it called this?) but separating the problem in a map-reduce fasion isn't always trivial. * An important piece of the puzzle is to get machinelearning to be scaleable in deeplearning(is this correct usage of deeplearning?) so that we don't have to generate features byhand but instead have raw input with minimal preprocessing (perhaps only log-scaling some raw input you know have a exponential behavour.

 $\ ^*$ Or redesigning the hardware it is running on to be optimal to .. (recursive call)