To: COGS External Review Committee

From: Brian Taylor

Date: March 13, 2015

I am currently a student in the Bachelor of Computer Science (BCS) program at UBC. I have a B.A. in mathematics from UBC, an M.B.A. in finance from the University of Illinois and a B.Ed. in mathematics education from UBC. I have taught high school mathematics for the last twelve years.

The BCS program requires students to construct a bridging module. I investigated a few example bridging modules and was intrigued by the COGS program. As a result I enrolled in COGS 200 in September 2014.

The course was taught by three professors: Dr. Laurie Fais, Dr. Christopher Mole and Dr. Robert Woodham. The lectures were given by one professor in an alternating fashion. This led to the course being quite stimulating, but somewhat inconsistent and at times confusing. It was hard to figure out what the main theme of the course was. This difficulty was actually addressed in class discussions toward the end of the course, and it seemed that the difficulty was intentional, to a certain extent.

The readings varied from scholarly magazine articles to textbook chapters to journal articles. I enjoyed the readings, although I preferred the magazine articles and textbook chapters to the journal articles. It’s not that I found the journal articles particularly difficult, but the journal articles tended to be in linguistics and seemed to require learning much more detail than was really required for the goals of the course. There was a heavy emphasis on linguistics and it was my impression that much more was expected of students in the area of linguistics than in the other strands, especially computer science. For instance, we learned about Turing machines, but were only ever required to write the simplest of all programs for a Turing machine. We also learned about Bayesian updating, but were only asked a single question to use it to make a calculation.

The instructors placed the students in groups of four for the purposes of a midterm and a group project. As there were only 107 students, one group only had three students. That happened to be my group. I had never written a group midterm before, but the process turned out to be more enjoyable than I expected. The group project was submitted in two stages. We were to propose a study that fit into at least two of the four COGS strands. Coming up with a suitable proposal was difficult, as we found after submitting our initial proposal. We were told that even though our proposal covered two strands, it was not interesting from a research point of view in both. This determination was made by the teaching assistant grading our paper. The teaching assistants were both undergrads and I wasn’t filled with confidence in their ability.

We made significant changes to our proposal for the final proposal. Since we weren’t actually going to perform the research the proposal didn’t necessarily have to be realistic. I found the exercise somewhat frustrating in this regard. The paper we ended up submitting was full of information on neural networks (a topic we had covered superficially in class). I do feel like I learned a lot about neural networks.

The assignments, midterm and final exam each consisted of a set of short problems drawn from the various disciplines covering material that had been presented in class or in the readings. I thought this was a reasonable style, but again, there was a bit of inconsistency in terms of the difficulty with the computer science related questions being very easy and the linguistics being the most difficult. Of course, a certain amount of the perceived difficulty may simply reflect my own preferences.

Overall, the course was a very worthwhile experience for me, even though I didn’t necessarily enjoy every aspect of it. It fundamentally changed my view of the nature of intelligence and the task of creating artificial intelligence. It gave me a better appreciation for the impressive abilities of the human mind.

Please don’t hesitate to contact me if you have any questions or would like clarification of any of my points.

Sincerely,

Brian Taylor

c.brian.taylor@gmail.com