

PAPER COGS138 - WHAT IS NEURAL DATA SCIENCE ABOUT?

C. ALEX SIMPKINS PH.D.

1. INTRODUCTION

This paper has been assigned in response to the need to clarify how to get the most out of this course. This set of techniques can be applied to other courses as well.

2. FORMAT

There is flexibility in the format. Please use a classic report type format. Ultimately you will generate a pdf and submit to a canvas link provided on the course webpage, course canvas assignment module, and as listed in announcements. You should include below structure:

- Length: minimum 2 pages, and single spaced
- Font: Arial, Times, or Helvetica font type or equivalent
- Size: 12pt font maximum
- Classic report format with title, name, date, course number

3. CONTENT

Please answer the following questions and consider them carefully. The idea here is to determine how you can get more out of the course, to walk away having gained a deeper understanding of the course topic and contents. What kind of active exploration of the topic could you engage in that you have not yet?

- Define this course's intent
- Draw comparisons between this course and requirements
- How does this course build upon what came before?
- How can you use your starting point in this course to expand your understanding?

So answering that you have not learned and it's all the same as previously or nothing is new here misses the point and cannot be accepted. Also from what I have read of the previous course outlines that's unlikely, and it could be you are misinterpreting this course.

If you feel that the course is not distinct from previous courses, then answer the question above before the list 'What kind of active exploration of the topic and course materials could you engage in that could help you walk out of the course with deeper understandings?' and 'How can you relate your knowledge to neural data science using the course material?'

4. DISCUSSION

The structure of exactly how you go about answering above is up to you as long as it is written as a paper, follows course policies, and is a sincere effort to consider these questions. I am taking this seriously this quarter because the pandemic has resulted in some reduction in learning outcomes, and I care about helping you maximize your learning benefit at the university. These kinds of questions are important to ask in every class - what am I learning? What is this about? How can I make it my own, walk away having gained something? Why is there overlap in a course? Repetition is part of learning, especially deep learning. Consider all the repetition you have done throughout your life along with deepening in various directions. You are not going to be a master of all material even for a particular course topic at the end of a 10 week course or even a BS, MS or PhD - the degree is the beginning but by actively putting in effort and taking responsibility for your learning internally rather than expecting it to be external, using the course and instructor as a guide you can be successful no matter the situation because there is no ideal situation.