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CS 6795: Cognitive Science

Fall 2023

Self-Directed Term Project - Milestone 1

Due: Sep 24, 2023

Assignment Submission (.PDF format):

Answer the following prompts in a maximum of 3 pages (excluding title page and references) in [IEEE format](#). Any content beyond 3 pages will not be considered for a grade. This length is intentionally set expecting that your submission may include diagrams, drawings, pictures, etc. These should be incorporated into the body of the paper.

Assignment Prompt:

In this first milestone, please describe your project, the project topic/theme, and your problem statement. This includes, but is not limited to:

- What broad topic are you studying (e.g., learning and education, design, HCI)?
- What specific research questions are you trying to answer through your project?
- Why are you interested in studying this question?
- Why is this important?
- Initial research design and expected outcome:
 - Literature Review Track:
 - What are some relevant topics of literature you will be looking at?
 - What do you expect to find at the end of your literature review project?
 - How are you going to conduct the review moving forward?
 - We also expect that you have identified 10-15 literatures as relevant and list them in your submission. You don't have to read the listed literature in detail just yet, but why and how are they relevant to your research questions? Each of your chosen literature must also have been published within the last 15 years.
 - CogSci Experiment Track:
 - What kinds of data are you planning to collect?
 - What do you expect to find at the end of your experiment?
 - How are you going to study your research questions?
 - Does it involve interacting with human participants? If so, what methods are you going to take to conduct a human-subject study (e.g., surveys, interviews, user study)?
 - Does it involve any system or prototype building? What is the experiment procedure?
 - Computational Model/Tool Track:

- What information will your system take as input and what will it give as output?
- What cognitive science concepts/lessons/principles inform your computational model/tool?
- Where and how are you going to derive these concepts/lessons/principles (E.g., through the lecture materials, through a short literature review, through user studies, etc.)?
- What kind of computational model/tool are you planning to build?

Note: The project should result in a small proof-of-concept prototype to illustrate the concept and functionality of your design (e.g., software prototype, video, tutorial, schematic drawings). You might find that a certain track lends itself to a particular kind of prototype; a software prototype might conform better to the computational tool/model track than it does to the literature review track, for example.

- Distribution of responsibilities for the semester. To help with your planning, we created a [template](#) for you to keep track of all the tasks required. You can download or copy the task list template and use it as a reference.
 - Be sure to think critically about the tasks and corresponding time commitments appropriate for your chosen project type.
 - To be clear, this M1 submission requires the planning of all tasks and time commitments for completing the remainder of the project milestones (M2-M4). Please submit the task list with this M1 submission as an appendix. The time commitment for the project must add up to **at least 100 hours**.

Project-Specific Questions:

This is intended to be a self-directed project. If you have questions about your topic or general research direction, please post a private message on Ed; but, understand that we might not be able to answer every question. Also, keep in mind that it is the intention of the milestone grading comments to provide topic guidance or actionable feedback.