

# Proposal Guidelines

For the structure of the proposal, we expect you can follow a research paper format, which consists of introduction, related work, datasets/environments, methodology, and evaluation description. In general, we want to see that you have a clear goal in the project. The technical details can be described in a rough manner, but in principle, you need to show what problem you want to study.

- **Introduction:** This part includes the background and motivation of your project. The problem has to be well-defined. What are the input and output. Why this is an important problem to study.
- **Related work:** Every research work must include a description of the current state of the problem. In this part describe what has been done in previous work on the same or related subject. We don't want you to just download their source code and run it on the released data. We want you to do something interesting. So here describe why what you propose to do here is useful, any aspect is novel and different from prior work. Doing comparison work can also be treated as novel if nobody has reached the same level of depth or scale.
- **Datasets/Environments:** For problems that work on a dataset, the following information is required. What data do you want to use? What is the size of it? What information is contained? Why is it suitable for your task? For problems that involve interactions with an environment: what is the mechanism of this environment? What is the complexity/total number of states of this environment? What is the input/output structure of an interaction?
- **Methodology:** What models do you want to use? You may change the model as the project goes, but you may want to indicate some type of models that might be suitable for your problem. For example, is it a supervised learning problem or unsupervised? What classifiers can you start with? Are you making improvements? Are you going to implement any baseline methods? You don't have to be crystal clear on this section, but it can be used to indicate the direction that your project goes.
- **Evaluation:** What metrics or methods do you want to use for evaluating your models?

Length: 1 page (or more if necessary). Single space if MS word is used. Or you can choose a latex template for a CS conference, e.g., <https://www.acm.org/publications/proceedings-template>.

Grading: Based on each section described above, 20 points per section. As you can tell, they're related to each other. Each group member will make separate submission with all group members' names indicated.