

DARPA HR001118S0044
Learning with Less Labels (LwLL)
Frequently Asked Questions

As of August 10, 2018

Q23. What team sizes are recommended? / Is there any size limit for a team?

A23. Whatever size is needed to accomplish the tasks.

Q22. Can you elaborate on how you envision the mechanism for teams to request the subset of data they want labeled?

A22. There will be an API that allows teams to request labels. All unlabeled data will be provided before the evaluations.

Q21. Are we free to choose example problem settings of our own when submitting a proposal?

A21. Challenge problems are defined by DARPA. You can work on others you have, but challenge problems are required. See A2 and A3.

Q20. Do we need to do all tasks (video, object, and translation), or just select one task?

A20. Yes, all tasks. See BAA Sections I.B and I.C for more details.

Q19. End TRL level of TA1?

A19. Anticipated Technical Readiness Level 3 to 4.

Q18. Any prior seedling funding?

A18. No.

Q17. Can a performer bid on both TAs? Will this require separate proposals, or can we bid TA-1 and TA2 in the same proposal?

A17. Yes, TAs can be combined into a single proposal. See A16.

Q16. Should only one TA be addressed in each proposal?

A16. Either one or both.

Q15. How many teams do you expect for TA1 and TA2?

A15. Depends on the quality of the proposals.

Q14. Is there going to be a down select at the end of each year? Do you plan down selects?

A14. None are planned.

Q13. Is video (i.e., temporal data?) expected to be a target in LwLL?

A13. See BAA Sections I.B and I.C for more details.

Q12. Is the set of use cases limited to the ones mentioned (object detection, recognition, translation, etc.)?

A12. We will consider other ones that go beyond and richer than those mentioned.

However, a proposal must address the evaluations mentioned in BAA Section I.C, and argue how their approach will meet program milestones.

Q11. Can you expand on what you mean by reducing nuisance dimension?

A11. It is how we learn domain independent and maximally discriminative representations for the problem.

Q10. Are there any known properties about class imbalance on the labeled data?

A10. Any known information on class imbalance problem will be provided during evaluation.

Q9. How unlimited/free is the unlabeled data?

A9. Unlabeled data in evaluations will likely be around 10^{12} to 10^{13} elements.

Q8. In doing Theoretical Analysis, some assumptions (e.g., i.i.d data) are often made that may not be true in practice. How do you feel about this?

A8. This is often the case, which makes for a less than usable theory. For more details on TA2, see Section I.B.

Q7. How does/could human expertise feature in all this (curation, queries, instructions, and examples)?

A7. See answer to Q5.

Q6. Is efficient use of human-expert-in-the-loop an allowed option to get more labels?

A6. See answer to Q5.

Q5. Are minimal human-in-the-loop systems out of scope?

A5. TA1 systems will be given data for challenge problems during evaluations. These systems may not make use of human interaction during the training or evaluation of their models. They must automatically 1) query a USG-supplied API for labels associated with a limited number of exemplars and 2) decide the form of their models and 3) train models.

Q4. The test/validation datasets for year-end challenge are in computer vision domain. Is that the primary domain you see as the focus for the LwLL Program?

A4. See BAA Sections I.B and I.C for details on the evaluation datasets, and Program performance targets.

Q3. Are you interested in Industry providing their own problems and datasets?

A3. See answer to Q2 below.

Q2. Can performers propose their own datasets and problem domains to anchor their efforts throughout the Program?

A2. Performers can use their own datasets for algorithm and software development. However, the evaluation will be on datasets provided by the Program.

Q1. Will you publish an attendee list?

A1. No. However, there is a teaming website (<https://www.schafertmd.com/darpa/i2o/lwll/teaming/>), which can be used for team formation.