MAKE SURE TO DOWNLOAD A LOCAL COPY OF THIS TEMPLATE BEFORE MAKING CHANGES

In 2024, we continue to welcome MLADS proposals on work involving foundation models and generative AI, as well as inviting other types of ML, AI, and data science work you are doing.

The template options below are meant as a guide to provide information that reviewers will look for in your submission. You do not need to follow them exactly.

Use either the Talk/Poster template option or the template option for Tutorials, Labs, Panels, Special Events, and Social Activities. Both are included in this document; delete the one you are not using. If you are submitting for a poster, you do not have to create the poster at this point—you just have to complete this template.

Please keep the submission length to around 4 pages. You can upload a 2nd file with supplementary material if you would like to include more content. NOTE: reviewers are encouraged but not required to read supplementary material; keep the important content in your 4-page-long main submission file.

Remove all boilerplate text before you finalize your proposal.

The bullet point format of the template is used to list the most important content categories you should consider including in your submission. This format is not meant to be followed in the submission. The submission should use mostly text, with tables and figures as needed. If you would like to include code, please put it in the supplementary material. Code cannot be used as a substitute for a detailed explanation of your methodology.

Examples of outstanding proposals

Template Option 1: Talks/Posters

Title

Introduction

- Business objective / Motivation
- Main contribution
- Why is the problem important?
- Why is it hard?
- Alignment to the conference focus ML, AI, and data science
- If your work is a continuation of work previously submitted to MLADS, please make sure to note what's new

Related Work

- Solution currently used in production / baseline solution
- Related products / published work
- What is considered State of The Art

Methodology

- Describe the overall analytical approach
- Why was the technique chosen?
- For applications:
    - What is the solution
    - What specifically does the AI predict/produce
    - What are inputs
    - System environment
- For methodology/theory
    - Evolution of theory
    - Proofs
- Algorithm
    - Conceptual overview of model(s) used
    - If the focus of paper: detailed algorithm description
    - Training process
        - Loss function / evaluation criteria
        - Train/Validation/Test data setup
        - Learning stats (e.g., loss vs iteration plot)

Data

- Where did data come from?
- Selection /sampling/filter process
- Type, size
- Examples

Results

The Program Committee pays special attention to this section. As examples of where this has been done well, we advise you look at how past Distinguished Contribution Award winning proposals have communicated the results of their work.

- Detailed results, comparison to baseline & state-of-the-art
- Justify the choice of evaluation metrics
- Discuss strengths / weaknesses
- Use your Results section to indicate how well your system accomplishes what it aims to do (for example—do not just focus on the speed of a response, but the quality of the response as well)

We recognize that evaluation of LLMs is an evolving practice. You may want to review the blog post How to Evaluate LLMs: A Complete Metrics Framework from Microsoft's Experimentation Platform team to understand current practices – please note that this link is to the internal-only version of the blog, which is more detailed and updated than what's published externally.

Responsible AI considerations

- What fairness-related measurements and mitigations have been implemented with the goal of reducing the number and severity of harmful predictions rendered to our users?
- If a model is trained on customer data, what mitigations and measurements have been implemented to preserve privacy?

Conclusion

- Main contribution (repeat from Introduction)
- Production status (if product/solution)
- Wider implications / application areas
- Open questions / next steps

Template Option 2: Tutorials/labs/panels/discussions/special events/social activities

You can also use the template option below if you are proposing a talk that truly does not align with the content categories above – such as if you are proposing a demo-based talk, a session focusing on design or socio-technical innovations, or a survey of recent research on a specific topic.

Title

Describe how the session will meet conference expectations around:

- Conference Focus
- Analytical Depth
- Business Impact

For more information, see this page: Conference Focus, Analytical Depth, Business Impact (sharepoint.com)

Main objective

- What is the audience expected to learn?

Previous Experience

- Describe any previous experience you have giving a tutorial/lab or hosting a panel/social activity at a conference.

Participants (for panels)

- List participants, their expertise and how it is relevant to the topic

Main topic and subtopics

- List the main topic and subtopics (sections) you will be touching upon

Detailed outline (for tutorials/labs)

- Please provide details of your tutorial or lab
  Make it comprehensive (at least 1 page)
  provide time split over sections

Technologies used (for labs)

Prerequisites

Audience expectations

- What do you expect the audience to know before attending the tutorial/lab/panel/special event/social activity?