

2024 Jelinek Workshop on Speech and Language Technologies

We are pleased to invite one page research proposals for an
Eight Week Residential Summer Research Workshop
at Johns Hopkins University in Baltimore, MD,
from **June 10 to August 2, 2024 (Tentative)**

CALL FOR PROPOSALS

Deadline: **Monday, October 9, 2023.**

We invite one-page research proposals for the next annual Frederick Jelinek Memorial Summer Workshop on Speech and Language Technologies. Proposals should aim to advance *human language technologies* (HLT) and related areas of *artificial intelligence* (AI) such as *computer vision* and *robotics*, and may enable any applications, including healthcare or education. Proposals may address emerging or long-standing challenges. Areas of interest in 2024 include but are **not limited to**:

SPEECH PROCESSING: *Zero-shot and few-shot adaptation of pretrained models for dialectal, code-mixed or far-field speech-to-text, speaker identification, emotion recognition & speech synthesis; Using large language models (LLMs) to synthesize realistic conversations in new languages, domains or channels for model training.*

TEXT PROCESSING: *Challenges of LLMs, including lack of auditability of training data, high pretraining & fine-tuning cost (esp. for academia), limited context-length, interpretability, prompt brittleness, hallucinations & misaligned behavior; Machine translation for informal and dialectal language, and low-resource languages.*

MULTIMODAL HLT/AI: *Multimodal foundation models/LLMs for audio, text and images; Multimodal HLT/AI for applications in education, healthcare delivery, public health and scientific/knowledge discovery.*

RESPONSIBLE HLT/AI: *Privacy-preserving model training and inference for HLT/AI; Designing HLT/AI systems to be equitable/fair to all demographics; Preventing/Mitigating harmful behavior of HLT/AI models; Securing HLT/AI models against adversarial actors and operating conditions.*

Research topics selected for investigation by teams in past workshops should serve as good examples for prospective proposers: <https://www.clsp.jhu.edu/workshops>.

All received proposals will be screened cursorily for *basic feasibility*, and results of this screening will be communicated by **October 13, 2023**. Authors of feasible proposals will be invited to an interactive peer-review meeting in Baltimore on **November 10-12, 2023**. At this meeting, proposals will be peer-reviewed in depth, revised iteratively and interactively to address any concerns and to incorporate new ideas from the floor, and 3-4 topics will eventually be selected for pursuit in Summer 2024.

These workshops aim to bring together “dream teams” to collaboratively pursue research on the selected topics: teams that are interdisciplinary and diverse in many ways including institutionally, demographically, and seniority of researchers. Authors of successful proposals typically lead these teams, and another 3-5 senior researchers from academia, industry and government join each team. 3-5 PhD students familiar with the topic are then selected, based on their demonstrated research performance, in consultation with the senior researchers. Finally, a few outstanding undergraduates, typically rising-seniors from a variety of majors, are selected via a nationwide search.

If you are interested in leading a dream team in the 2024 Summer Workshop, please **submit a one-page research proposal** for consideration, detailing the problem to be addressed. *If a topic in your area of interest (e.g. your proposal) is chosen to be pursued next summer, we expect you to be available to participate in the workshop for 6-8 weeks.* We are not asking for an ironclad commitment at this juncture, just a good faith commitment that if a topic advocated by you is chosen, you will actively pursue it. We in turn will make a good faith effort to accommodate any personal/logistical needs to enable your travel to, residence at and participation in the workshop, including airfare, housing, meals and incidentals.

The peer-review meeting and workshop are *in-person*, for we feel strongly that meeting face to face has been crucial to past successes. However, we also follow all public health advisories and guidance from the University/Government and will revert to a hybrid or virtual meeting/workshop if needed.

Please submit proposals to [<jsalt2024@lists.johnshopkins.edu>](mailto:jsalt2024@lists.johnshopkins.edu) by **Monday, October 9, 2023.**