## The Center for Language and Speech Processing

at Johns Hopkins University invites one page research proposals for a

NSF-sponsored, Six-week Summer Research Workshop on

Machine Learning for Language Engineering

to be held in Baltimore, MD, USA, June 25 to August 7, 2012.

## CALL FOR PROPOSALS

Deadline: Monday, October 24, 2011.

One-page proposals are invited for the 18<sup>th</sup> annual JHU summer workshop. Proposals should aim to advance the state of the art in any of the various fields of Human Language Technology (HLT) or of related areas of Machine Intelligence, such as Computer Vision (CV).

**Proposals are welcome on any topic of interest to HLT, CV and technically related areas**. For example, proposals may address novel topics or long-standing problems in one of the following areas.

- **SPEECH TECHNOLOGY**: Proposals are welcomed that address any aspect of information extraction from speech signal (message, speaker identity, language,...). Of particular interest are proposals for techniques whose performance would be minimally degraded by input signal variations, or which require minimal amounts of training data.
  - **NATURAL LANGUAGE PROCESSING**: Proposals for knowledge discovery from text are encouraged, as are proposals in traditional fields such as parsing, machine translation, information extraction, sentiment analysis, summarization, and question answering. Proposals to improve the accuracy or to enrich the output of such systems, or extend their reach by improving their speed, scalability, and coverage of languages and genres are desired.
  - **VISUAL SCENE INTERPRETATION:** New strategies are needed to parse visual scenes or generic (novel) objects, analyzing an image as a set of spatially related components. Such strategies may integrate global top-down knowledge of scene structure (e.g., generative models) with the kind of rich bottom-up, learned image features that have recently become popular for object detection. They will support both learning and efficient search for the best analysis.
- **TASK-BASED EVALUATION METHODS:** Different tasks that utilize human language technology impose different types of demands on the technology and require different levels of performance. Proposals are solicited that address task-based evaluation of functionality as well as usability of various technologies such as speech transcription, spoken term detection, information extraction, machine translation, and text, image and video retrieval.

Research topics selected for investigation by teams in past workshops may serve as good examples for prospective proposers (<u>http://www.clsp.jhu.edu/workshops</u>).

An independent panel of experts will screen all received proposals for suitability. Results of this screening will be communicated by **November 1**, 2011.

Authors passing this initial screening will be invited to an interactive peer-review meeting in Baltimore on **December 2-4**, 2011. It is expected that the proposals will be revised at this meeting to address any outstanding concerns or new ideas. Two to three research topics and the teams to tackle them will be selected at this meeting for the 2012 workshop.

We attempt to bring the best researchers to the workshop to collaboratively pursue the selected topics for six weeks. Authors of successful proposals typically become the team leaders. Each topic brings together a diverse team of researchers and students. The senior participants come from academia, industry and government. Graduate student participants familiar with the field are selected in accordance with their demonstrated performance. Undergraduate participants, selected through a national search, are rising star seniors: new to the field and showing outstanding academic promise.

If you are interested in participating in the 2012 Summer Workshop we ask that you submit <u>a one-page</u> research proposal for consideration, detailing the problem to be addressed. If your proposal passes the initial screening, we will invite you to join us for the December 2-4 meeting in Baltimore (as our guest) for further discussions aimed at consensus. *If a topic in your area of interest is chosen as one of the topics to be pursued next summer, we expect you to be available for participation in the six-week workshop.* We are not asking for an ironclad commitment at this juncture, just a good faith understanding that if a project in your area of interest is chosen, you will actively pursue it. We in turn will make a good faith effort to accommodate any personal/logistical needs to make your six-week participation possible.

Proposals should be submitted via e-mail to <u>clsp@jhu.edu</u> by 4PM EST on Mon, October 24, 2011.