



Lowering the Barrier to Innovation:

Low-cost but compelling tasks

- ◆ Small vocabulary, to reduce decoding costs
- ◆ Complex enough that other researchers & gov't sponsors will care about the results
- ◆ Training data must be public, test data must be changing
- ◆ Define task to avoid encouraging a simple “data collection” solution, e.g. cross-corpora tests



A more community-minded culture

- ◆ Reviewing (it's not a zero-sum game)
 - Diversity is healthy!
 - Value breadth as well as depth in research... both can lead to deeper understanding
 - Make room for many players, big and small
 - Multi-disciplinary work takes more time
 - Academic resources are more limited than industry
- ◆ Intellectual exchange
 - Comparing notes leads to better understanding
- ◆ Value/reward infrastructure contributions



For our industrial colleagues...

- ◆ It's difficult to do interesting ASR work in US universities without help from industry
- ◆ Notice that there are more academic players now
- ◆ Though times are tough, you can still support the academic innovation you need
 - Small \$\$: hardware & software gifts, internships, ...
 - Infrastructure: lattices, forced alignments, software, ...
 - Provide baselines: publish on small tasks, publish results on intermediate systems
 - Knowledge: advisory boards, thesis committees, tutorial lectures



Possible Points for Discussion

- ◆ What is the goal? Speech as a communication process, general audio,
- ◆ How do you do something radically new when people have had decades of tuning on HMMs?
- ◆ How can the community work together to push big programs (e.g. dialog systems, multi-modal systems) in the absence of large DARPA programs?
- ◆ How can companies & universities work together more effectively?