Special Issue on Open Source Machine Translation Tools

We live in exciting times for machine translation. The field is making rapid progress due to the refinement of statistical methods and the convergence of statistical, rule-based, and knowledge-based approaches and increased linguistic sophistication of the employed models. Machine translation has found its way to everyday use through web based services such as by Systran and Google. An increasing number of research papers are published by a growing research community.

While the growing complexity and refinement of methods leads to advances in the field, there is also the danger that it becomes too hard for a newcomer to build a machine translation system in her garage (or, more commonly, her graduate research office): there are just too many tools to be build and methods to be mastered. We believe that it is essential for maintaining machine translation as a vivid academic research field that tools and resources are most widely shared. The history of the field so far has shown that advances come from many different directions, often from newcomers entering the field. This is possible due to a environment of shared tools and resources.

The goal of a serious of annual workshops called “Machine Translation Marathon” that started in 2007 under the EU-funded EuroMatrix project (Framework Programme 6) has been to disseminate methods and tools for machine translation. This year, the Third Machine Translation Marathon, held January 26–30 in Prague, also hosts a open source convention. We hope to encourage the sharing of open source resources by providing a such a forum.

We solicited papers that describe open source tools for machine translation. We selected among the submissions nine papers that are assembled in this special issue of the Prague Bulletin of Mathematical Linguistics (PBML No. 91). The papers cover different approaches to machine translation — ranging from rule-based to statistical — and describe full systems and specialized methods. All the papers describe tools that are readily available, and thus enable future research to start novel research in the field without spending too much time catching up with the state of the art.

Phillipp Koehn
Co-editor of the special issue
pkoehn@inf.ed.ac.uk