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# Post-Editing Technology and Practice



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AMTA 2012 Workshop on  
**Post-Editing Technology and Practice**

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(editors)

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## Foreword

Post-Editing has been around for just about as long as operational machine translation (MT) systems; as such, it is possibly the oldest form of human-machine cooperation for translation. Recently, however, there seems to be a surge of interest for post-editing among the wider user community, partly due to the increasing quality of MT output, but also to the availability of free, high-quality MT software.

Yet, the success of a post-editing operation depends on more than just software, and for every post-editing success story, probably many more failures go unreported. This workshop is an opportunity for post-editing researchers and practitioners to get together and openly discuss the weaknesses and strengths of existing technology, to properly and objectively assess post-editing effectiveness, to establish better practices, and propose tools and technological post-editing solutions that are built around the real needs of users.

The program consists of a mix of oral presentations, posters and software demonstrations. It is a snapshot of the wide variety of scientific and technological work currently taking place.

A number of researchers are tackling the difficult task of understanding the post-editing process itself, for example by studying the relationship between cognitive effort and post-editing time (Koponen et al.), or the relationship between cognitive effort and pauses (Lacruz et al.); others are examining the potential of crowdsourcing post-editing (Tatsumi et al.).

For these sorts of investigation to be effectively carried out, tools are required, specifically those designed for the purpose of observing post-editors and evaluating their work. This workshop features demonstrations and presentations of many such tools: the CASMACAT Workbench (Elming and Bonk), Transcenter (Denkowski and Lavie), PET (Aziz and Specia), and Ruqual (Melby et al.). New technology beyond tools for post-editing *per se* is also taking shape: tools for detecting MT errors (Valotkaite and Asadullah), tools for correcting them (Mundt et al.), or complete online post-editing frameworks with integrated MT functionalities (Penkale and Way).

Post-editing experiments are complex and costly, and it is critical that the experimental evidence that results is preserved and shared between researchers. This is the motivation behind the CRITT TPR database (Carl).

Finally, a special session on *Post-editing experiments in operational settings* will feature accounts of “real-life” experiments, such as recently took

place at Autodesk (Zhechev; Beregovaya and Moran) and various EU institutions (Poulis and Kolovratnik), as well as a report on GALA's ongoing "Post-editing Experiment" (Canek).

We wish to thank the AMTA people for making this event possible, providing logistical and moral support at all times. We must also thank the program committee for delivering high-quality reviews on a very tight schedule: you guys are the best.

Sharon O'Brien, Michel Simard and Lucia Specia

# **Oral Presentations and Posters**

## **The CRITT TPR-DB 1.0: A Database For Empirical Human Translation Process Research**

Michael CARL

## **Post-editing Time as a Measure of Cognitive Effort**

Maarit KOPONEN, Wilker AZIZ, Luciana RAMOS  
and Lucia SPECIA

## **Average Pause Ratio as an Indicator of Cognitive Effort in Post-editing: A Case Study**

Isabel LACRUZ, Gregory M. SHREVE and Erik ANGELONE

## **Reliably Assessing the Quality of Post-edited Translation Based on Formalized Structured Translation Specifications**

Alan K MELBY, Jason HOUSLEY, Paul J FIELDS and Emily TU-  
IOTI

## **Learning to Automatically Post-edit Dropped Words in MT**

Jacob MUNDT, Kristen PARTON and Kathleen MCKEOWN

## **SmartMATE: An Online End-To-End MT Post-editing Framework**

Sergio PENKALE and Andy WAY

## **To post-edit or not to post-edit? Estimating the benefits of MT post-editing for a European organization**

Alexandros POULIS and David KOLOVRATNIK

## **How Good is Crowd Post-editing? Its Potential and Limitations**

Midori TATSUMI, Takako AIKAWA, Kentaro YAMAMOTO  
and Hitoshi ISAHARA

**Error Detection for Post-editing Rule-based  
Machine Translation**

Justina VALOTKAITE and Munshi ASADULLAH

**Machine Translation Infrastructure and Post-editing  
Performance at Autodesk**

Ventsislav ZHECHEV

## **Demos**

### **PET: A Tool for Assessing Translation Quality Through Post-editing**

Wilker AZIZ and Lucia SPECIA

### **An Analysis of Machine Translation Post-Editing Productivity in Large-Scale Enterprise Deployments**

Olga BEREGOVAYA and John MORAN

### **LSPs Experiment with MT Post-editing: Preliminary Results**

David CANEK

### **TransCenter: Web-Based Translation Research Suite**

Michael DENKOWSKI and Alon LAVIE

### **The CASMACAT Workbench: a Tool for Investigating the Integration of Technology in Translation**

Jakob ELMING and Ragnar BONK

### **SmartMATE: A Post-Editing Framework for Self-Serve Machine Translation**

Sergio PENKALE and Andy WAY

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Michel SIMARD – National Research Council Canada  
Lucia SPECIA – University of Sheffield

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